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THE KANGAROO KEEPS ON TALKING.

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THE KANGAROO KEEPS ON TALKING

OR

THE ALL-BRITISH CONTINENT.

A DESCRIPTION OF AUSTRALIAN LIFE AND INDUSTRIES.

BY

L. ST. CLARE GRONDONA

Author of

"THE ROMANTIC STORY OF AUSTRALIA."

*Associated with the Australian Delegation to
the Imperial and Economic Conferences, 1923*

With an Introduction by

The Right Honourable STANLEY BALDWIN,
PRIME MINISTER.

THE VICTORIA PUBLISHING HOUSE,
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1924.

TO THE CHERISHED MEMORY OF MY
MOTHER AND FATHER WHO INCULCATED
IN ME A LOVE OF MY COUNTRY AND A
PROPER APPRECIATION OF MY BRITISH-
AUSTRALIAN CITIZENSHIP.

OBJECTIVES.

The Author, while endeavouring to interest and *amuse* the reader, emphasises, and elaborates upon, the following facts :—

1. The United Kingdom's requirements from overseas in vital foodstuffs can be purchased more cheaply within the Empire than in foreign countries.
2. The more dominion produce that is purchased in Great Britain, the more British manufactured goods are purchased in the dominions (and colonies).
3. The capacities of the dominions economically to absorb more than a desultory stream of new settlers is in proportion to their ability to find stabilized markets in the United Kingdom for the resultant increased output of produce.
4. Imperial economic independence is the best safeguard for Peace.
5. The dominion producers need educating properly to cater for the Home consumer.

Concerted individual action can be a great factor in achieving all these objectives.

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THE RIGHT HONOURABLE S. M. BRUCE, M.C.,
 Prime Minister of Australia.

INTRODUCTION

BY

The Right Honourable STANLEY BALDWIN,
Prime Minister.

Mr. L. St. Clare Grondona aptly reiterates a war-time apophthegm, "The Australians are the *Young of the British*."

In "The Kangaroo Keeps on Talking," it has been the author's endeavour to anticipate with an answer any question which might reasonably be expected to arise in the minds of those of his readers who may contemplate making their future homes in the All-British Continent.

What he has written should be of considerable interest, also, to business men desirous of opening up new, or extending existing, Anglo-Australian trade relations.

The economic facts set out in what is rightly termed the Important Foreword, as well as in the rest of the text, may have more far-reaching effects than the Author contemplated.

The matter concerning Australia's Tariff Policy and Imperial Preference—in the last chapter—is a frank exposition of a subject which is sometimes misunderstood in certain quarters in the United Kingdom.

The suggested establishment of a Householders' Imperial Association is one worthy of wholehearted support.

I trust that "The Kangaroo Keeps on Talking" will be widely read.

There is a ring of truth, good humour and good fellowship in every chapter, and there must be few phases of life in the Commonwealth upon which Mr. St. Clare Grondona does not shed easily absorbed and very interesting information.

The retail price barely covers the cost of the actual printing and binding; and my only regret is that I cannot make a present of a copy to every person in Great Britain.

I am indebted to—

An Australian Lady, for the suggestion in regard to a Householders' Imperial Association :

The High Commissioner of Australia (the Right Honourable Sir Joseph Cook, G.C.M.G.) for the use of many photographic blocks, to the Official Secretary and the Director of Migration and their staffs, for various courtesies :

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Mr. Donald MacDonald, a noted Australian field naturalist and journalist, one of whose delightful articles on Fish and Fishing in the Commonwealth I have taken the liberty of reproducing in part.

Messrs. J. M. Niall, Andrew Williamson, Sir Hugh Denison, K.B.E., Sir Samuel Hordern, K.B.E., C. L. Baillieu, G. C. Klug, Samuel Mackay, Frank Fox, and to various other Australians in London, for advice and assistance in several directions.

I am also deeply indebted to someone who prefers to remain anonymous.

I hope that before proceeding to the matter under the Chapter headings, the reader will carefully digest the very serious and *really* Important Foreword.

L. ST. CLARE GRONDONA,

AUSTRALIA HOUSE,
LONDON, W.C. 2,
1924.

IMPORTANT FOREWORD.

(Dealing with vital foodstuffs.)

A broad survey of the actualities of Great Britain's overseas trade reveals some quite amazing facts in relation to the importation of commodities in daily use in the United Kingdom; and more especially in regard to vital products such as wheat, dairy produce, and meat. The figures I quote are based on Board of Trade Returns, as shown in the volume entitled *The Annual Statement of the Trade of the United Kingdom with Foreign Countries and British Possessions, 1922. Volume II*. That is the latest return published in such form and covers the period 1919 to 1922, inclusive.

During those four years the United Kingdom imported 358 million hundredweights of wheat, 61 per cent. of which came from foreign sources, and the balance from the dominions and colonies.

The average price paid over the four years to foreign suppliers was 20/5d. per hundredweight. The average price paid to the suppliers within the Empire was 17/5d. Thus the foreigner received 3/-* more on the average per hundredweight.

This state of affairs is difficult to analyse, but if the consumers in the United Kingdom had actually secured their full requirements in wheat from within the Empire over the whole of the four years reviewed and *at the average price in each year which was actually paid for the quantity which did come from Empire sources, the gross sum of over £23,000,000* would have been saved*. That statement is a truism—on the Board of Trade returns.†

I am aware that certain important factors ob-

*For significance of single asterisks throughout the Important Foreword, see Certificate of Accuracy on page 10.

† All prices are C.I.F. British Port and are based on returns which importers are legally obliged to furnish. The penalty for furnishing a false return is £100.

United Kingdom would be *no worse off than at present*. In practice, I think it would be found that whatever price were fixed would automatically itself become world's parity—less freight—in a very short time.

And there might be fewer American wheat millionaires.

There is much to be said even for a coercive policy, one, for instance, which applied an export duty to Imperial wheat sold to foreign countries—until the Empire's estimated requirements had each year been met. I think I may safely say that the dominions would be prepared to consider the adoption of *any* such action to secure stabilisation and assured markets; but that borders on discussing Imperial Preference with its incidence, and it is not the purpose of this volume to discuss that question however attractive such a discussion might be.

To those who would aver that the dominions could not supply Great Britain's needs immediately, I would point out that Australia alone during twelve months ending June, 1922, exported approximately 118 million bushels, only 35 per cent. of which came to Great Britain; in other words, the Commonwealth during that twelve months exported more than 50 per cent. of the United Kingdom's needs; and I have said nothing about Canada.

To prove how profitable it is to the United States' speculators to control the British Market, one has only to consider the vast quantities of Canadian wheat which are sent over the borders to the States for resale in England. During the four years under review 79,900,000** bushels of Canadian wheat was purchased by America, and during those same four years the Americans actually exported to the United Kingdom 280 million bushels.*

The natural question which arises is: Why did not the Canadians export direct to Great Britain? And the only conceivable answer is that they found it more profitable to sell to the United States. It is possible that from past experience they had found out that American wheat marketing organisations with power

** Figure supplied by courtesy of the American Consul, London

to call up millions sterling capital do not exist for nothing.

It is to be emphasised that in September, 1922, on account of pressure from the United States farmers a duty of thirty cents per bushel was imposed on Canadian wheat entering the United States. *The British consumer* has been—and will continue to be—required to pay that duty on all Canadian wheat which has entered the United States for subsequent export to the United Kingdom, and of course he has to pay the additional freights and meet the profits which accrue to the United States' wheat speculator.

The actual and the potential wheat growing capacities of Australia alone are dealt with in chapter XIII.

During the four years already quoted, eleven million hundredweights of butter was imported, 52 per cent. of which came from foreign countries, which were paid, on an average, £11 14s. 8d. per hundredweight. In return for supplying 48 per cent. of Great Britain's requirements, the Empire producers received only £10 13s. 0d.—or £1 1s. 8d. less than the foreigner. As illustrated in the case of wheat the sum involved was £3,667,000;* that is to say, that figure represents the margin paid for the foreign product over and above what the same product would have cost if a hundred per cent. *had come from Imperial sources* at the average price the latter actually received for their quota in each year.

Cheese presents rather a different story and one from which a considerable lesson can be derived. During those four years the Empire supplied 91 per cent. of imports at an average price of £6 6s. 11d. per hundredweight. The nine per cent. from foreign countries cost £6 7s. 10d., so that on every hundredweight of Empire cheese, the consumer was saved an average of 11d. Nevertheless, not purchasing the whole of his requirements from within the Empire the consumer was £152,000* out of pocket.

In respect of sweetened tinned milk we find that the Empire's quota—15 per cent. of over four and a quarter million hundredweights—cost at the rate, in the average per annum, of £5 12s. 9d. which was

8d.* per hundredweight less than the price paid to the foreigner. But if the latter had in fact marketed this commodity more cheaply the reason would not be far to seek as sugar is so important an ingredient in sweetened condensed milk.

In the pre-Napoleonic war days the British Empire virtually controlled the world's sugar supplies, and the other European nations had ample evidence of the strategic value of this commodity. During last century Germany, and other continental countries made enormous strides in the production of sugar beet. In order to smash the British growers certain foreign governments paid substantial bounties on all sugar exported to the United Kingdom. These bounties were such that it became usual for continental sugar to be sold in England at a much cheaper rate than that at which it was obtainable in its country of origin; in fact, continental sugar was actually sold in London below cost of production.

The effect, though gradual, was disastrous to Empire growers, both at Home and abroad. In the West Indies, whence great supplies had been forthcoming, sugar plantations were abandoned, and the suppliers turned their disheartened activities into other and more lucrative avenues. The result was that the Empire fell from its position of domination in respect of sugar to one of entire dependence on foreign sources for supplies. No, not entire! In 1913 four per cent. of the United Kingdom's sugar imports came from within the Imperial Realm.

Those possessing quite the shortest of memories will recollect the war-time position in relation to this almost vital commodity. In regard to tinned milk it is exceedingly interesting to note that unsweetened preserved milk has been sold for the four years under review at 4/7d. per hundredweight lower than the foreign article.

At least one large milk preserving firm having large ramifications throughout the British Empire, has given practical evidence of possessing Imperial vision. It now draws its milk supplies in an ever increasing volume from the various Dominions where, in addition

to purchasing from local farmers it has established its own farms and up-to-date factories.

It was satisfactory to be able to note that Empire sugar production advanced since the War under the encouragement of a slight preferential tariff.

For the four years under notice the Empire supplied 24 per cent. at £1 15s. per hundredweight, which was $\frac{4}{3}$ d. per hundredweight *dearer* than the price paid for the 76 per cent. supplied by foreign countries. Naturally, as the industry within the Empire has to be re-established, and as initial costs are heavy, it would have been some time, even with the help of the preferential tariff, before Imperial sugar would have been able economically to compete with the established foreign industry.

Australia's capacity as a milk and sugar producer is dealt with in Chapters XVI and XIX.

In regard to tinned meat, the imports for the years 1920, 1921 and 1922, amounted to over two and a half million hundredweights, 73 per cent. of which came from foreign countries, which received an average price of £6 11s. 9d. per hundredweight. For his 27 per cent. quota, the Imperial producer was paid only £5 12s. 10d., which was 18/11d. less than the price paid to the foreigner, and in regard to this product the British consumer may be said to have been out of pocket £2,790,000* because the capacity to produce this commodity within the Empire *was neglected*.

But the story is not a fraction told. Foreign countries supplied 21 million hundredweights of frozen beef, *viz.* 73 per cent., and were paid £4 1s. 9d., as against £3 6s. 0d. per hundredweight on the average paid to our own kith and kin,—a margin of 15/9d. in the foreigner's favour. Translated into losses, as in the case of the other commodities, frozen beef cost the British consumer over £10 million* more than it would have done had the full quota of our requirements been forthcoming *from Empire sources*.

It is clearly to be understood that this comparison refers solely to frozen, and not to chilled beef. The importations to England of the latter product, from within the Empire, are negligible to date.

As to what Australia alone can do in beef production see Chapter X.

The position in regard to frozen lamb and mutton is much more satisfactory. The Empire supplied 72 per cent. at an average price of £4 2s. 0d., but strangely enough the foreigner received 2/4d. more for his quota of 28 per cent.* The greatest portion of supplies came from Australasia.

Perhaps the most devastating figures are those in relation to wine, whereof more than 95 per cent. came from foreign countries, and an average price of 13/3d. per gallon was paid for it. The less than five per cent. from within the Empire secured only 6/9d. per gallon, a difference in the foreigner's favour of 6/6d.; and the foreigner supplied the United Kingdom with nearly sixty-two million gallons. The consumer in Great Britain paid £19,600,000* more for foreign wines than he would have needed to pay if he had supported the Empire. In *one State* in Australia alone this year the vintage resulted in an output exceeding ten million gallons. The Empire's capacity to produce excellent wines is unlimited.

The position in relation to raisins is no better. Of 3,800,000 hundredweights less than 20 per cent. came from Empire sources. The price paid averaged £4 6s. 7d., which was 9/10d. per hundredweight less than was paid to the foreigner who supplied eighty per cent. of our needs. What I term the loss on the four years was over £1,400,000.*

With regard to fresh fruit, I select apples as being the best carriers. Apples produced in any part of the Empire can be marketed in London in prime condition and furthermore they can cater for English requirements at all seasons of the year. And yet the Empire supplied only 45 per cent. of our requirements from 1919 to 1922, and the price received averaged £1 16s. 5d. per hundredweight, which was one shilling* less than that paid to the foreigner.

On the other hand, 95 per cent. of imported jams came from Empire sources at £3 15s. 11d. per hundredweight, which was (on the average) 12/7d.* per hundredweight less than the cost of the foreign article.



"—AND THERE THE TREASURE LIES!"

(Reproduced by courtesy of the proprietors of "The Daily Express")



Location of the actual City of Melbourne, Victoria

I do not know if the facts and figures in the foregoing have been presented to the public in that form on any other occasion. Surely they offer an argument that overwhelms those who assert that Imperial preference means that "your loaf will cost you more."

But Imperial preference does not *necessarily* demand parliamentary enactment to render it at least partially effective. What is imperative is education in indisputable facts. The oversea dominions and colonies seek no favoured treatment. They wish to be dealt with on the business merits of their case.

The figures I have given deal with only a few commodities. These articles have been selected because they are in daily use, *not* because the figures in relation to them were especially favourable to my arguments. There is no reason why 100 per cent. of all these articles could not be produced within the Imperial realm at an early date. If costs of products from within the Empire—and from foreign sources—were on a *par* one would imagine that the Homelander would give the former at least a sentimental preference. But when he is actually out of pocket by supporting the foreigner it is inconceivable that—once he is aware of the fact—he should continue literally to *throw money away*. And very little of the money which is sent to foreign countries comes back in payment for British manufactured goods. Americans, for instance, spend only about 12/- *per capita* in a year in the United Kingdom, whereas Australians and New Zealanders spend annually from £12 to £16 in Great Britain. And the purchases by other dominions are far in excess of those of any foreign country.

It must be obvious that if the Empire overseas were producing upwards of 100 per cent. of the United Kingdom's needs, prices would fall below those which have obtained in the past. The greater the production the cheaper the product. There would still be healthy competition as between the various dominions, and, once more be it emphasised, that the dominion suppliers take *British goods in payment* to an extent that makes foreign countries look absurd.

The all important question is, why do the people in the United Kingdom neglect such obvious advantages? The pity of it is that the advantages are *not* obvious until they are known and appreciated, and the consumer is strangely indifferent to his own interests. Seldom does it occur to the householder to demand the name of the country of origin of an article.

The selling "arrangements" in respect of foreign goods are better organised than those in relation to supplies from the dominions. The foreign articles had *first control* of the markets. Their cost of production was, and is, less than in the dominions where a high standard of living prevails; and yet the foreigners receive higher prices.

It is not always in the interests of the retailer that customers should purchase Empire products. It sometimes suits his book to speak disparagingly of them and to push the foreign articles. But that is seldom necessary, for the purchaser is usually apathetic, and does not bother to ascertain where the article comes from. Instead of a proper partiality for what is grown and supplied by one's own fellow Empire citizens overseas, there is a positive prejudice against "colonial" goods. And interested parties foster this prejudice.

I am prepared to be told that my argument is fallacious if the foreign article is superior in quality. Who, after all, are best able to produce what is required by Britishers in the United Kingdom? Is it the foreigner or is it the other Britisher who lives overseas?

Whatever may be said of some products the argument hopelessly fails in regard to the most vital of food stuffs, namely, wheat. Canadian and Australian wheats are equal, if not superior, to any in the world, and yet Empire wheat sold during one year at an average of about 5/9 per hundredweight under what was paid to foreigners over the same period.

How it comes about I do not pretend to know. There may be an "explanation." Doubtless organizations handling foreign produce would have many plausible theories to offer. It is well worth the while of interested parties to produce explanations.

The dominions are in a measure at fault in that

they have few proper sales organisations, either individually or collectively. United the foreign suppliers stand, divided the dominion suppliers fall.

I have already said that I do not pretend to know how the sale of foreign products is controlled, but I know what *might* take place,—and be very effective. The Empire goods come forward at different seasons, and with no effective sales-control in London. If they are in quantities sufficient to compete seriously with the same type of foreign articles, those who control the latter can afford to under-sell. This would be especially effective if the product were perishable, but it would be quite as telling a manœuvre if the dominion producer were in a hurry for his returns,—and he generally is. Competition would be a disheartening business under such auspices, and for all one knows, the dominion product, if its price *were* forced down, might be bought up by the foreign rings, and the consumer get not even passing benefit. In any event, once the serious competition passed, the consumer would again be in the hands of the people who handle the foreign articles.

It is made unbelievably difficult for the dominion producer to secure a footing in the United Kingdom. Take the case of dried fruits, raisins and currants. One would imagine that it would be a simple matter to dispose of these commodities;—nothing of the kind. The importer finds it necessary to sell through a broker, who is permitted to trade only with the dealer, and, in turn, woe betide the retailer who attempts to purchase wholesale from other than a dealer. He may do so once—buy direct with a dominion purveyor of raisins, for instance. But his trade rival round the corner may suddenly display raisins three pence per pound cheaper,—that *could* be arranged. The first trader—unable to sell at a profit, would be forced back to the dealer—but he could hardly expect his reception to be altogether cordial.

Such incidents *may* happen, not only in regard to dried fruits, but in respect of many other commodities. But, as I have definitely proved from indisputable figures, the consumer suffers all along the line.

Despite the fact that the party, which in 1923 appealed for Tariff Reform to an apathetic and sadly unenlightened electorate, was not returned with a working majority,—millions of votes were recorded in favour of legislative enactment to secure Imperial Preference.

It is the individuals who recorded such votes that I desire first to interest. If they shewed that their Imperial vision was susceptible of being translated into practical individual action, an immense stride forward would be made. Each such householder should make it clear to his tradesman that he will not buy foreign goods if Empire goods are obtainable. Individual action of that kind could easily be made collective. Let Imperial "shop" become a favourite topic of conversation. Is it too much to suggest that a few householders in each centre should combine in a united purpose with a determination to *act*, as well as think and talk, Imperially?

I am averse from high sounding titles, but the name of such an organisation should be suggestive. It might be called The Householders' Imperial Association.

Such an institution could achieve perfectly amazing results in a few years. It would serve a threefold purpose.

1. Its practical members would housekeep more economically—if the Board of Trade returns are to be credited.
2. By its central authority it could keep in touch with the various producers' organisations in the dominions and colonies.

This is most important. Tastes differ with climates. For instance, people who live in cold regions need more sugar than those who live in hot countries—need it constitutionally and the need is reflected in the taste. Thus it is that I have often heard that Australian bottled or canned fruit is not sweet enough for the English palate. That is regarded as a defect but it is capable of prompt adjustment. Similarly, in regard to many other features of many other products, the Householders' Imperial Association, speaking directly for the actual consumers, would educate the

overseas Empire producers in all respects, properly to cater for the Home market. The dominions would hail the establishment of such an organisation with delight. I am quite aware of the fact that the dominions need educating. Jams and other preserves are not always "put up" in the most attractive form. The labels are often anything but inviting to the English buyer. More trouble might also be taken with the contents with good results. I am not decrying products from the dominions and colonies. I am merely indicating improvements that would follow the advice of the association. Furthermore the central authority could be posted with the prices paid to the producers and prices charged to the consumers.

3. Through the association the householders could deal effectively with the retailers.

The grocer, who did not stock Empire products, would be reported to the district association, which would call on him for an explanation. In most cases that would suffice, but, if necessary, "further action" would doubtless suggest itself to the association. It is not too much to anticipate that before long every shop would be prevailed upon to display a conspicuous notice in its window reading:

Ask for British Products in this Establishment.

If you are not able to secure them you are invited to communicate with—

The Secretary,

Householders' Imperial Association,

266, Strand, W.C. 2.

Possibly some of the goods asked for would not be obtainable at the outset, but the Empire is capable of providing every necessity and every luxury; and if the demand were proved to exist the association would promptly advise the Home or dominion producer to develop the production of that particular requirement.

But such action would be necessary only in isolated cases, as the Empire already produces practically every conceivable product,—as witness the British Empire Exhibition.

When an organisation such as I have suggested has sprung into being, the coping stone of proper Imperial development will have been put in position. Other nations may be left with profit to their own devices. Too long has Great Britain played the role of the milch cow, the foreigners having the cream; too long have the overseas dominions and colonies been fed on skim milk.

In succeeding chapters I have endeavoured to provide interesting reading matter to meet a variety of tastes, but I have sought to impart definite and reliable information in regard to the resources of one of the greatest dominions. I trust that each member of an average family will find at least some part of the book to be interesting, and not altogether tiresome.

*Chapter I.**Wembley Reflections.*

"I have been listening to the comments of the people as they pass the various exhibits; I mean to the comments of those who obviously have not been to Australia. It has made me feel that I would like to talk to each of them for an hour or two, to explain what all the exhibits really represent—what is behind them, and how these visitors, as individuals, can assist in the development of the Commonwealth, to their own great advantage, as well as to ours."

It was in the Australian Pavilion at Wembley. The speaker was a Queenslander whose boyhood had been spent on his father's sheep station in New South Wales. He had been educated in Melbourne, the capital of Victoria, and thereafter had taken up land in Western Queensland where, some years ago, I was his neighbour. He knew his Australia well. There was nothing in his appearance to pronounce him other than an Englishman born and bred. He had fought in the Boer War, on Gallipoli, and in France.

"For the first time in my life," he went on, "I've felt a strong inclination to make a speech! I would like to climb up on the top of one of these stands and lecture all day—and every day—while the Exhibition is open. One cannot but deplore one's impotency in seeing so much valuable interest going—for so great a part—to waste.

"After one has been through half a dozen of these pavilions," he added, "one acquires a positive embarrassment of riches—in vague information. I can imagine the visitor, who has no knowledge of the Empire overseas, trying to sort it all out when he arrives home. Of course, his outstanding impression will be of the immensity and range of Imperial resources, but one wonders if it will ever occur to him that it is *his* intimate personal concern that those resources should be properly exploited."

I need quote no further from my friend's little homily which has resulted in the production of this book. I hope to enable the reader to learn something tangible about at least one great dominion—something more than was to be gathered by what was too often but

a brief tour of its pavilion. As my friend remarked, every visitor to Wembley must have been bewildered by the magnificent, and yet ridiculously inadequate, representation of what are the resources of Empire. One's imagination was fired, and surely there must have surged within him a strong desire, if not a determination, to do *something* to make the British Empire still more glorious, a still more potent influence working for the great good of its own citizens, and as the most beneficently powerful factor in the world's affairs.

I shall endeavour to write this book in the manner in which my friend from Queensland would have talked to my reader had it been possible. I am fortified as to the type of information I should impart by having spoken to numerous visitors.

One was frequently asked, "What is the Australian climate like,—very hot, isn't it?"

Such a question immediately put the enquirer into the category of people who have no conception of the vast area of the Island Continent. It was akin to asking, "How big is a piece of stone?"

In the extreme north, a tropical sun beats down with intense heat for several months of the year. Rainfalls of over twenty inches in twenty-four hours have been recorded in some of the coastal areas, and, in the far interior, there are certain dry localities where twenty inches does not fall in three years. In order that these figures may be appreciated it should be remembered that the average annual rainfall in London is under twenty-four inches, whereas in some of the coastal districts of Queensland it approaches two hundred! Over two million square miles, or more than half the area of Europe, has a reliable rainfall of from 15 to 60 inches annually.

So much for the variations in climatic conditions even in the far north. In the extreme south—nearly two thousand miles distant—you may enjoy your winter sports among the snow-clad Australian Alps. There are localities where fires are often essential to comfort at night in the middle of summer. And between those extremes you may choose every variety of temperature. The Commonwealth's area is greater than that of the



A Victorian Scene near Bright



Semi-Tropical vegetation in Northern New South Wales

United States of America, and the variation in climate is as marked as it is in Europe, though within a different range, because the extreme north of Europe is colder than Southern Australia, and Northern Australia is hotter than Southern Europe.

I have actually been asked, quite hopefully, whether I knew some obscure though worthy individual "who lives in Australia." That is quite as quaint as if the question were put in respect of an equally obscure, and certainly no less worthy, person "who lives in London." In fact, when areas are compared, it is still more quaint because the seven million Londoners are concentrated within perhaps a fifteen-mile radius, whereas the five and a half million Australians are scattered over a country twenty-eight times as large as Great Britain—as it were from Christiania to Constantinople, and from Lisbon to Petrograd. And yet, an Australian probably has a very much wider circle of acquaintances than people who live in England. The reason is perhaps due to his being a considerable traveller within his own country, and to an absence of conventional reserve which is quite understandable. When two men meet on a bush track they do not stand on ceremony. Such meetings may be rare, and such opportunities for an exchange of news are not to be permitted to pass. The fathers or grandfathers of the city dwellers of to-day were perforce men of the bush in the early days, and the ease with which they struck up acquaintanceships with strangers has been, to a certain extent, transmitted through succeeding generations; though it is not to be inferred that the Australian is without social reserve.

But it is not the city dweller who travels a great deal, unless it be to another city or to a rural pleasure resort. Rather is it the countryman who regards a trip to town, as often as he can afford it,—and that is not seldom—as being essential to his happiness. It is the ambition of every Australian to visit England. Great Britain is always "Home" even to the third and fourth generations of natives born.

There is but little difference in personality or deportment as between the inhabitants of any of the

State capital cities and those of London. One seldom sees a silk hat, but apart from that there is nothing to differentiate between a West End and a Melbourne crowd. Sydney's population exceeds one million and Melbourne's is not far below that figure. In the rural towns the citizen is rather prone to affect a "best suit," but the city dweller is quite as sophisticated in the sartorial sense as his kinsman in London.

Contrary to the general belief in England, probably not two per cent. of Australians have ever seen a wild kangaroo, although there are countless thousands of these animals in the distant bush. Comparatively few have any first-hand knowledge of what is termed, "out-back." Many Australians have never set eyes on a flock of sheep or a herd of cattle larger than one which might be seen within twenty miles of London; and on some of the large sheep stations—out-back—over one hundred thousand sheep are shorn annually, and herds of forty to fifty thousand cattle are not uncommon. But although so many Australians have not seen much of actual bush life, they are familiar with its incidence and they "know all about it." Probably not half the population have seen more than a few dozen of the aboriginal blacks who, although still numerous in the extreme north and in certain parts of central Australia, have disappeared from nearly all the settled localities.

It seems desirable to clear away what appears to be a general impression in England that the Australian is usually to be found in the lonely bush, remote from the amenities of social life, that his occupation centres around the herding of sheep and cattle, and that most of his time is spent on horseback. The percentage of Australians who have not ridden twenty miles in the course of their lives as compared with the percentage who have travelled thousands of miles in electric trains and trams, and motors, would provide a contrast that would amaze the Londoner. I venture to say that for one mile covered on horseback nowadays over a hundred miles are negotiated by some mechanical process.

I hope this book will give a clear description of

what life in Australia really means. The contrast provided by the use of mechanical, as compared with horse transport, cannot be dismissed without an expression of regret that the number of people who follow rural occupations is so small as compared with the number who dwell in the cities and their environs. But it is the more marvellous that the comparatively few pastoralists and tillers of the soil are able to produce the enormous wealth which is represented by the rural produce marketed annually. This will be described in detail as we proceed. It will also be made clear that there is still a wealth of romance for those venturesome enough to assume the role of pioneers in the distant bush.

Just as there is an explanation for most natural phenomena so can the drift to the cities easily be accounted for, and the factors which can counteract the urbanisation of so great a percentage of the population will be obvious to the reader. As I describe the actual wealth production to date, and elaborate upon the illimitable resources of the Commonwealth, I shall ask him to bear constantly in mind a phrase coined at the Economic Conference* by the Australian Prime Minister (the Right Honourable S. M. Bruce, M.C., M.P.), who set out the requirements of all the dominions as being, "men, money and markets." One wishes to avoid anything in the nature of political propaganda; one essays merely to state facts and to tell the *individual* how he can—and more important perhaps, how *she* can—help at least one dominion to a proper exploitation of its natural wealth. It will have been clear to those who have read the Important Foreword that the housewife will housekeep much more economically, year in and out, by insisting on securing British and dominion products for all her requirements.

The wonderful degree to which the dominions reciprocate may be illustrated by pointing out that in 1922 Australia bought more British manufactured goods and produce than the whole of the United States of America, although the U.S.A. has about

*1923.

twenty times the population of the Commonwealth. In other words, one Australian is worth as much to Great Britain as some twenty American citizens.

Britain's best customer is India, and then comes Australia, followed by U.S.A., France and Germany, in that order. These countries (excluding Australia) have a total population of 536 millions, and their gross purchases in 1922 amounted to £227 millions.

Australia alone bought over £60 millions, or an average per head of her population of £12! On that basis, if the population of the Commonwealth were increased to twenty-four millions, the Australian trade would be more valuable to the Mother Country than that of India, U.S.A., France and Germany *combined*. Every new settler forms a fresh link in a beneficent Imperial chain. His departure from the United Kingdom means that there is one less to be provided with employment. By settling in Australia he remains a British citizen, and at the same time he creates a greater demand for British goods. Every hundred thousand Britishers who go to the Commonwealth send back to England each year over a million pounds to be disbursed in wages. If that same hundred thousand went to U.S.A., the amount sent back would be a mere £60 thousand.

Surely no further evidence is required to prove the Imperial worth of migration to Australia and to emphasise the desirability for supporting the people, who live in the Antipodes, by purchasing their products.

The Commonwealth comprises six States, New South Wales, Victoria and Queensland, in the east; South Australia, Western Australia and the island of Tasmania. It embraces also the Northern Territory, an immense area of undeveloped country that was formerly the northern portion of South Australia. Prior to the Federation in 1901 the States were self-governing colonies; under its Constitution, the Commonwealth Parliament has control of all external affairs as well as defence—both naval and military—postal services, customs and excise and such matters. Each State governs its own, what one may term

domestic affairs such as land and mining administration, education, police and internal transportation.

It must constantly be remembered that Australia is a "White Continent." No coloured people are admitted to its shores. Furthermore, ninety-eight in every hundred of its citizens are British born. They all speak the same language. Dogma apart, Christianity actuates all that is best in them. They are all imbued with the same domestic, social and national ideals. They are fervid Imperialists and are intensely loyal. Of those who are in England to see the Exhibition, many display, on their coats, tiny maps of Australia which symbolise the very real pride the wearers feel in their British-Australian citizenship. Others, and perhaps the majority, are a whit less demonstrative. They carry no distinctive badge, but pride in their Commonwealth and Empire is none the less the outstanding characteristic of them all.

Chapter II.

The Outward Voyage.

To look at an ocean liner in miniature, or in reality, is, for most of us, to experience at least a vague longing to embark upon a voyage to far off lands. Life on ship-board nowadays is assuredly little but a delightful holiday.

To travel to Australia one may choose from a variety of routes and an even greater variety of liners. One may make the journey in a mail steamer in either first, second or third class. Some of these ships carry first and third, and others, first and second class passengers. A few cater for all three. Or one may make the voyage by one of the several lines which provide for one class only. This may be either first, second, or third. Furthermore, different ports of call are visited by the ships of different companies, but these are all set out in detail in pages 43 and 44, whereon a table is printed showing fares, classes, ports of call and periods at sea between the ports as visited by the various lines.

The most popular route is perhaps that through the Mediterranean Sea and the Suez Canal, and the period of the voyage to the nearest point of Australia

occupies about a month. Passengers can travel overland and join some vessels at Mediterranean ports, thus saving three or four days, but for comfort it is as well to embark from England.

Some ships call at Gibraltar—four days out—and an opportunity is offered to spend a few hours ashore. Vessels anchor a couple of hundred yards from the jetty and passengers are taken to the landing steps in motor boats. It is a novel outing to drive about the narrow streets of the quaint old Spanish town which nestles beneath the forts. The ancient fortress gates are locked nightly, even in time of peace. British soldiers are everywhere in evidence and one feels a new sense of security and satisfaction that this most important maritime key is held by the British Empire.

Certain liners visit Marseilles, in which city and its delightful environs a very cheery day can be spent. Vessels belonging to other companies call instead at Toulon, Naples and Taranto and some go direct to Port Said.

The description of life aboard ship which follows is more or less common to all lines irrespective of route or class.

The voyager soon strikes up acquaintanceship with several of his fellow passengers. This is made easy, even for the most retiring person, by the games and amusements, in which everyone is expected to join. There is invariably among the voyagers some genial soul of whom the experienced traveller will say on sight, "That fellow will be sports' secretary." And so it generally transpires.

To be a successful sports' secretary one requires to be an enthusiast, an optimist, indefatigable, jovial, unselfish—and very persistent. If one possess all those, and many other, attributes and if he contrive to win no prizes, he is sure to be a cheerful nuisance,—and a success. He has to collect subscriptions, refuse to take "No" for an answer, and insist on every subscriber taking his, or her, part in all the events.

There are cricket matches and tournaments in deck quoits, deck billiards, deck tennis, and *mirabile dictu*, deck golf; in bridge, chess, and draughts. There are

deck gymkanas in which egg-and-spoon races vie with that nerve racking enterprise "putting the eye in the pig," wherein portly gentlemen crawl about the deck blindfold, chalk in hand in hopeful endeavour.

"Are you there, Mike?" is another interesting diversion, the intricacies of which I need not enter upon.

There are dances or concerts nearly every night, and at least two fancy dress balls. Each day sweeps are conducted on the ship's "run" and there is no Home Secretary's Department to interfere. The sports' secretary,—hindered by a committee,—is master of all ceremonies.

Father Neptune and his full retinue come aboard when the Line is crossed. The secretary who, with the chief officer and the bo'sun, has engineered this is generally the first of His Oceanic Majesty's (voluntary) victims. It is the secretary's especial function to set an example in cheerfully swallowing the malodorous lather, in submitting to a vigorous "shave"—passing witty remarks the while—and in being properly cleansed in the canvas swimming bath.

At the trial by jury, the same secretary is charged with,—*inter alia*,—inefficiency, ineptitude, insubordination, indiscriminate flirtation, and piracy on the high seas. He is invariably found guilty, ordered to provide suitable refreshment for the judge and jury, and, to refrain himself from alcoholic beverages for the remainder of the voyage.

With frequent ports of call, each permitting of a visit to a strange country—with strange people, differing from those seen a few days earlier—with interesting fellow voyagers to talk to, and with wireless news coming from all parts of the world, the time passes unbelievably quickly—especially for the sports' secretary.

I have heard people aver that travelling on a large steamer nowadays is like living in a first-class hotel, but until someone can take me to a hotel where the guests enjoy egg-and-spoon races, "put the eye in the pig," and indulge in "Are you there, Mike?" on the floor of the lounge, I prefer to consider a sea voyage incom-

parably the more interesting.

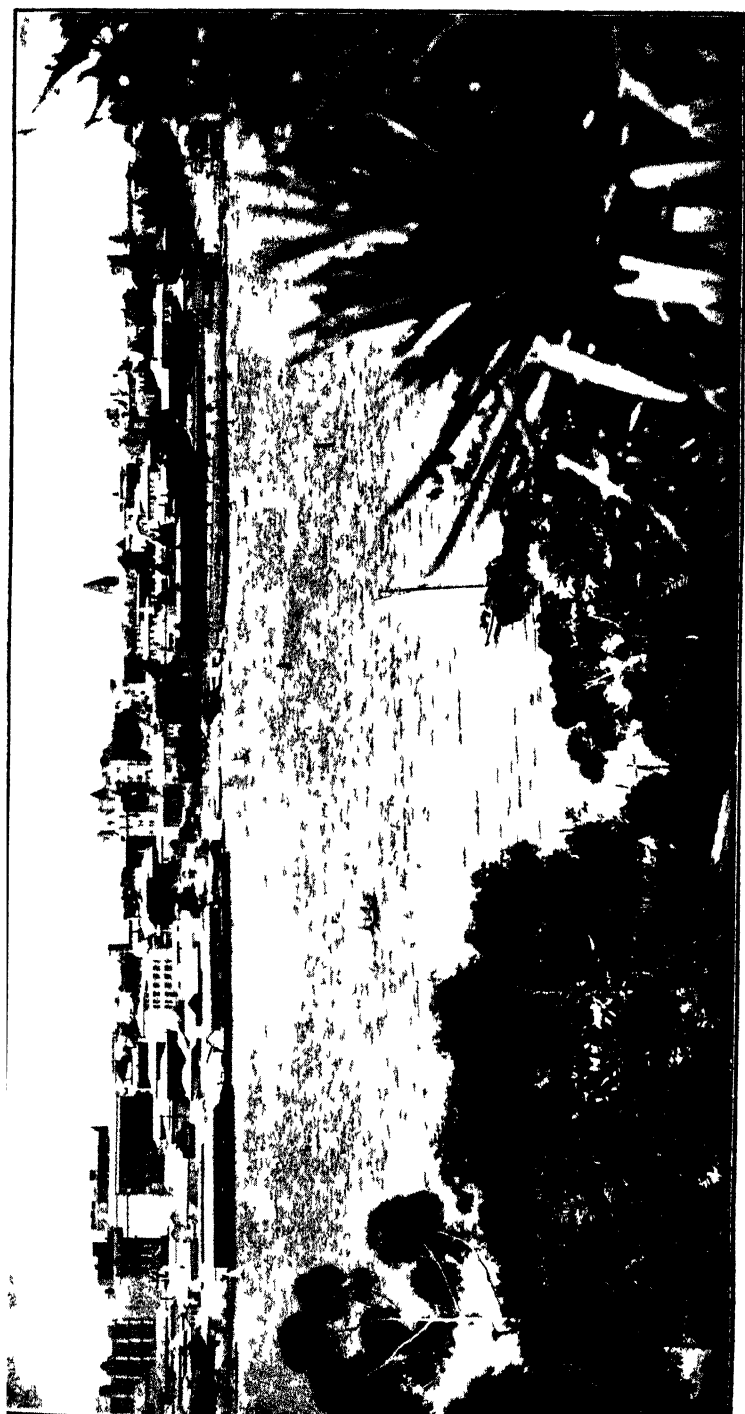
One could live indefinitely in a hotel and not make an acquaintance. This is almost impossible on a sea voyage, where acquaintanceship often ripens into life-long friendship. Young men and maids get opportunities to know each other remarkably well—and the progress of each *affaire* provides an interesting topic for speculation. Old gentlemen and middle-aged ladies are often strangely affected by the subtlety of the sea air, the plashing of the waves at the ship's side, and all that sort of thing during the delightful tropical evenings. Propinquity works wonders.

The trip through the Canal is always most interesting. One looks out on a vast expanse of desert to port and starboard, over bow and stern. Turbaned Arabs in flowing robes, stoically silent and characteristically aloof, watch the vessel pass within speaking distance. Camel trains regard the intrusion into their domain of an actual ship of the desert with docile indifference.

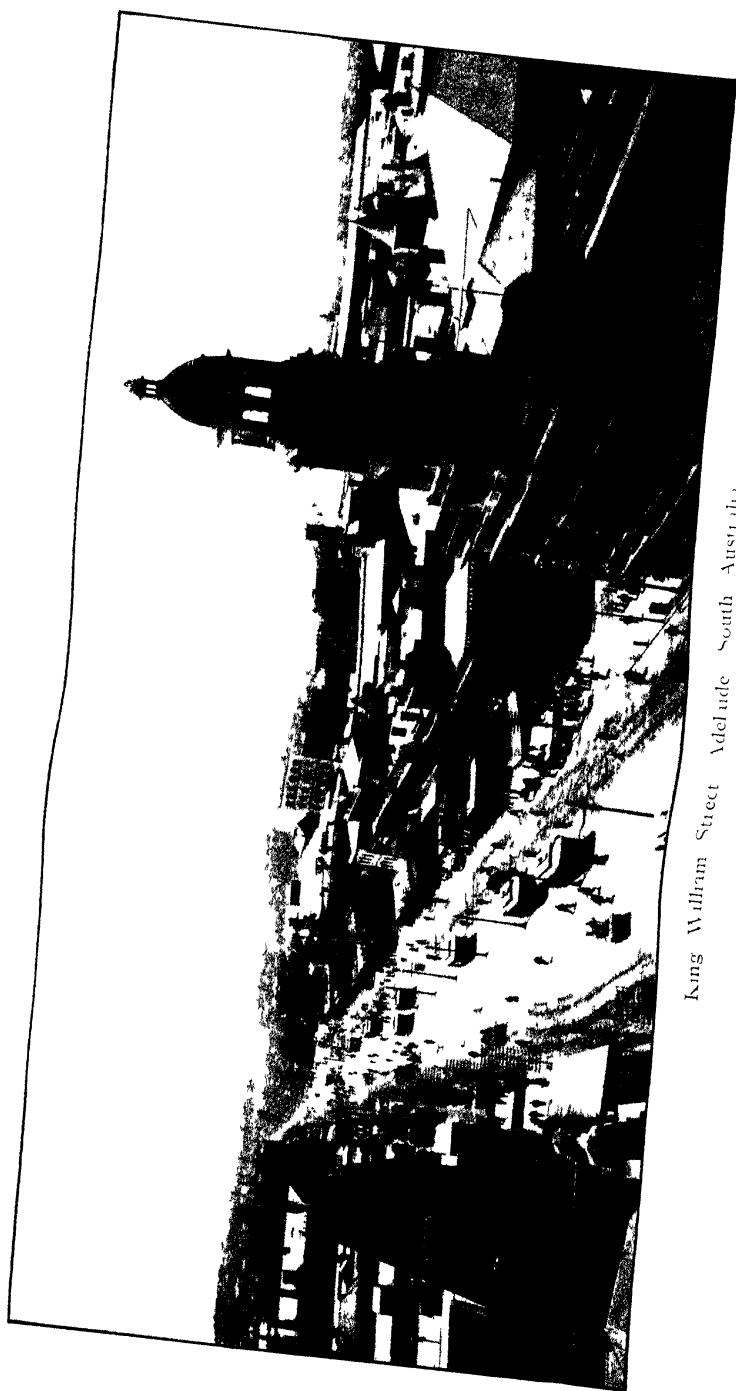
One feels he could throw a biscuit on to land at either side. There is a strange stillness broken only by the subdued, rhythmic, throbbing of the propeller,—subdued because the engines have slowed down to slacken speed and avoid the wash which would otherwise play havoc with the stone work which keeps the sands of the desert at bay. An occasional oasis, surrounded by rich vegetation in which waving palms predominate, gladdens the eye.

Port Said, where an opportunity to land is usually afforded while the vessel is waiting its turn to enter the canal, provides the first touch of the Oriental to which the passenger will become quite accustomed by the time he has been ashore also at Suez—and perhaps Aden or Bombay—and Colombo. Port Said, the Gate of the East, is the most fascinating port in the world. Ships and men of every nationality here foregather.

One makes the acquaintance of the "gully gully!" man at the Canal ports. He is the dusky gentleman who extracts chickens from your breast pocket and performs other feats of magic with bewildering cunning. He maintains a remarkable flow of conversation filling in all gaps with "Gully, Gully! No



Swan River Perth Western Australia



King William Street Adelaide South Australia

cheeken, no ra-bit, no mon-geese!"—all of which is *apropos* nothing in particular. He addresses the most important looking ladies as "Mrs. Cornwallis West," "Madam Melba," or something equally droll. Everybody laughs,—it is a great joke that has survived very many years. At other eastern ports one may study snake charming and the miraculous growth of mango trees from under a hat, at close quarters.

Aden and Suez are dreary places, but intriguingly interesting if only because any strange country with a coloured population is interesting.

Bombay, with its stately domes and minarets, is a romantic city which is visited by one company's liners. One is impressed by the amazing extravagance evidenced in the palaces of the princes of India.

The Parsee cemetery on a hill overlooking Bombay is a gruesome place. Great, sleek, vultures,—the embodiment of all that is grim,—perch in hundreds on the hearse-like palms that fringe and intersperse the cemetery. The Parsee's method of disposing of his dead is to place the bodies on the tops of towers to which the vultures have access. The birds are sacred. When all the flesh is torn from the skeletons the bones fall through a grill and are (I think) cremated.

Colombo—which like Suez, is a port of call for all liners on the Canal route,—is delightful. The Ceylonese are clean people and very cheerful. Rickshaws are everywhere in evidence and hire-cars are plentiful. The two drives one should endeavour to make are to Mount Lavinia by rickshaw, and to Kandy by motor. On the first visit it is an excellent plan to proceed at once to Thomas Cook's offices and to hire a servant, who, in addition to acting as guide, is a buttress between the voyager and the mendicancy to which he is subject on all sides. Begging and tip-seeking is the popular pastime among the natives when a passenger steamer is in port. Handling strange money one has no idea what to give in return for the extraordinary range of "services" rendered by the army of black men who, all uninvited, attend upon one's person. The servant supplied by Cook's, at a most

reasonable charge, is indeed a boon.

The next port of call is Fremantle in Western Australia—whence if one so wishes he can travel by rail to Rockhampton on the opposite side of the Commonwealth, a distance of nearly 4,000 miles!

The people one meets on the Suez route represent a wide variety of interests. There is always a quota of military men on their way to their regiments at Gibraltar, in India, or in some of the other Eastern Stations. There are tea planters, and those who deal in the merchandise of the East, civil servants, an occasional naval man and globe trotters; in addition to Australians and New Zealanders—squatters, and professional and commercial men. There are Indians—rajahs, students and merchants.

Some are travelling for pleasure, others are on business; but all are bent on making the voyage as enjoyable as a school vacation.

The voyage via the Cape is not so interesting as that through Suez because there are fewer ports of call. Incidentally the concerns of the travellers themselves are not generally so varied and it follows that the people as a whole may not be so interesting. But with the longer periods at sea perhaps greater zest is shewn in the ship's sports and amusements. The voyage commences from London, Glasgow or Liverpool.

The first call may be at the Cape Verde or the Canary Islands. Here the vessel is besieged by negro traders with small boats—dealing in beads, skins, ostrich plumes, and fruit. I have not been ashore at either of these groups of Islands although I have called at both.

My most striking recollection of the Cape Verde Islands is of the natives' method of fishing, which they commenced when they had sold their wares. Their *modus operandi* was as effective as it was disgusting. For bait they chewed up raw fish of the mackerel variety. After a long, and I have no doubt, thorough, process of rumination, they spat the product on to the surface of the water. A few applications of this kind resulted in a seething shoal of fishes coming to the

surface for the feast, the silver scales glittering through the dark blue water. Then the niggers proceeded with crude wire nets to scoop the spoils into their boats. Each scoop was literally full of fish.

Another interesting diversion hereabouts is the fearless diving of the natives, in spite of the fact that a dozen sharks may be visible near the ship. The diving of these niggers is much better and certainly more venturesome than that of the coolies along the Suez route. At the Cape Verde Islands I saw a boy, about ten years of age, dive from the rail of a deep draughted steamer and come up on the other side of the vessel with a half crown that had been dropped from a point directly opposite the spot from which he dived.

Cape Town is the first African mainland port. It is a most interesting old city and the thing to do there is to drive up the slopes of Table Mountain to inspect the magnificent memorial to Cecil Rhodes. The panorama from that point of vantage, to my mind, is one of the finest sights of the world. Groote Schuur, Rhodes' old home on the mountain slope, is open for inspection by visitors and is a most fascinating place. The outstanding features of Cape Town are its excellent roads which I understand have been built by negro-convict labour. Motoring on these highways is indeed a luxury.

Cape Town seethes with blacks, most of whom have few claims to being prepossessing. No doubt the residents become accustomed to the smells, but the casual visitor is not always favourably impressed.

Durban, with its costly artificial harbour, is a newer city. It possesses many fine buildings, and here again the roads are excellent. The blacks in this part of Africa are not nearly so assertive as at the Cape. The rickshaw "boys," who are generally Zulus, are the gentlemen of the Dark Continent. They are superbly built and show to great advantage under their picturesque headgear of ox's horns, and, with what one may term their mural decorations of skins and tails. They are jovial fellows and very respectful but, withal, they possess a dignity of bearing and manner which begets a considerable measure of respect in reciprocation.

The most important outing at Durban is to visit the Zoo. The voyager who has the good fortune to be invited to the Durban Club, will carry away very happy recollections of that most hospitable and delightful social centre.

And now comes the long stretch to Fremantle—two weeks without sight of land. But, as we have seen, the time passes merrily the while, and at worst it is consoling to remember that in the old "wind jammer" days it might have taken three months to negotiate the same journey.

The writer has not, as yet, travelled to Australia via America. There are three routes; via Panama, via Vancouver, and via San Francisco; the former is rather an interesting voyage and the two latter involve some days' train journey across the American Continent. But there is compensation in the voyage across the Pacific Ocean. Such fascinating places as Honolulu, Samoa and Fiji are ports of call and much of the voyage is through the palm-girt isles of the South Seas. New Zealand is visited and the traveller has a day or two ashore at Wellington.

One may also travel from Western America via the East calling at Japan, Shanghai, Hong Kong, and other captivating ports. In other words, one may approach Australia from all points of the compass—from all parts of the world.

Throughout the voyage, as is said in hotel prospectuses, "the cuisine is all that can be desired," in the first, and, in a lesser degree, in the second saloon, whether the ship carry two classes or only one. Fresh fruits and vegetables, as well as other produce, are taken aboard at every port, and the longest period at sea on the Suez route by any line is eleven days.

As far as the third class is concerned, the fare paid hardly permits of luxurious accommodation, but the food is, as school advertisements have it, wholesome, varied and abundant. The quarters are scrupulously clean; and the third class passenger now travels in comfort incomparably superior to the "steerage" of twenty years ago.

One must not overlook so important a domestic

detail as the laundry. Laundering is executed aboard many of the ships and in any event all ports of call cater for rush orders. Thus it is that one does not need nearly such an extensive wardrobe for a long sea voyage nowadays as one did a few years ago. A great boon is that women passengers, on many vessels, may use the ironing-room at certain times, and a limited amount of clothes washing can be done in the cabins.

It is as well to mention the clothes one does need. It is to be remembered that both very hot and cold weather is experienced on a long voyage. For wear in the tropics one should have at least two tussore silk or duck suits. Flannels are always useful. First saloon passengers should remember that it is permissible to don a white Eton jacket—instead of an ordinary dinner coat in sultry weather. A couple of such jackets are a great comfort, especially when dancing on hot nights—in whatever class. For the rest, one wears something in the way of a grey flannel suit. Most young men affect shorts in the tropics, although I knew one ship's captain who objected to the display of bare legs. An unwary passenger once addressed that same captain as "Skipper"!!!

He did not do it a second time.

At most ports of call out one can purchase slop made whites very cheaply; suits to measure can be secured in a few hours. Of course one needs canvas shoes and a deck chair.

On the grounds of incompetence I eschew the task of making suggestions as to the sartorial equipment required by womenfolk.

On ships carrying more than one class there is not a great deal to choose between the lots of the first, and second-saloon passengers. There is not quite the same measure of comfort and there is certainly not the same degree of luxury in the latter, but nevertheless many people who can well afford to pay a first saloon fare prefer second-class where life is a little more easy-going in such details as putting on a dinner jacket at night. For the individual to whom money is a serious consideration the saving effected by travelling

second more than compensates for the difference in accommodation and service. Nowadays many army officers adopt the cheaper mode of travelling as do most students. The second-class deck is sometimes more commodious than that provided for the saloon passengers, and in calm weather many people prefer dancing on the former.

The chief objection to second-class travelling is the restriction on the passenger's movements. He has access only to those portions of the ship which he has paid for the use of. While this is quite equitable, it is calculated to be irritating to the free born Britisher who often prefers to travel on a one-class vessel on which he has "the run of" the ship. I do not infer that he may mount the bridge, or that he is permitted to enter on the galley to confer with the chef, but—within reason—his movements are subject to no restrictions.

One company controls a mail steamer service through the Canal and also a one-class branch line via South Africa.

A doctor and a dispenser are carried on all passenger ships and there is a daily inspection from bow to stern by the commander, the chief officer and the medical officer.

Boat drill is a frequent precaution. Each passenger knows exactly what part of the ship to go to in case of emergency. Life belts are worn on all these occasions which are made interesting by short talks from the ships' officers on what each person should do in time of stress. But it is all *precaution* not *anticipation*; for disasters on ocean liners are rare occurrences nowadays.

LADING. Shipping is the *sine qua non* to the proper development of the Empire. Stabilization of trade means cheap freights. Vessels which sail to a set programme are often run at a loss. A ship may have only an eighty per cent. complement of passengers and a mere sixty per cent. of its cargo space filled; but it

Statement Showing Steamer Connexions with Australia from Europe, &c.

Compiled by Thos. Cook and Son, Ltd., Ludgate Circus, London, E.C.4.

As at August, 1924

Name of Steamship Company.	Port of Departure.	Route and Time in Days (in Brackets) between Ports.	Break of Journey.	FARES FROM PORT OF DEPARTURE.						
				1st Single	1st Return.	2nd Single.	2nd Return.	3rd Single.	3rd Return.	
<i>Aberdeen Line</i> ...	London	Plymouth (1) ; Teneriffe (6) ; Cape Town (20) ; Albany (35) ; Melbourne (40) ; Sydney (44) ; Brisbane (48)	At Cape Town by pre-arrangement	£ s. d. 86 0 0 to 94 0 0	£ s. d. 151 0 0 to 165 0 0	—	£ s. d. —	£ s. d. 37 0 0 to 44 0 0	£ s. d. 67 0 0 to 79 0 0	
<i>Australasian Commonwealth Line</i> ...	London	Port Said (10) ; Colombo (21) ; Fremantle (31) ; Adelaide (35) ; Melbourne (37) ; Sydney (41) ; Brisbane (48)	At one port by pre-arrangement	ONE CLASS ONLY						
								37 0 0 to 66 0 0	66 12 0 to 118 16 0	
<i>Blue Funnel Line</i> ...	Liverpool	Las Palmas (6) ; Cape Town (20) ; Adelaide (39) ; Melbourne (44) ; Sydney (49) ; Brisbane (58)	Same as P and O. Co.	88 0 0 to 94 0 0	154 0 0 to 165 0 0	—	—	—	—	
<i>Federal Line</i> ...	Liverpool	Route varies : via Panama or via the Cape	Same as Orient Line	88 0 0 to 92 0 0	154 0 0 to 161 0 0	—	—	37 0 0 to 44 0 0	66 0 0 to 81 0 0	
<i>Orient Line</i> ...	London (Tilbury)	Gibraltar (4) ; Toulon (6) ; Naples (8) ; Port Said (11) ; Suez (12) ; Colombo (21) ; Fremantle (31) ; Adelaide (35) ; Melbourne (37) ; Sydney (40) ; Brisbane (44)	The same as P and O. Co. except 3rd class, on which no break allowed	104 0 0 to 136 0 0	182 0 0 to 239 0 0	76 0 0 to 88 0 0	133 0 0 to 154 0 0	38 0 0 to 45 0 0	68 0 0 to 81 0 0	
<i>Peninsular and Oriental Steam Navigation Co.</i>	London (Tilbury)	Gibraltar (4) ; Marseilles (7) ; Port Said (12) ; Aden (16) ; Colombo (22) ; Fremantle (32) ; Adelaide (36) ; Melbourne (38) ; Sydney (41)	At any port en route Ticket to be endorsed by Company before leaving	104 0 0 to 136 0 0	182 0 0 to 239 0 0	76 0 0 to 88 0 0	133 0 0 to 154 0 0	—	—	
<i>P. and O. Australia via the Cape Service</i> ...	London	Las Palmas (6) ; Cape Town (21) ; Adelaide (47) ; Melbourne (48 50) ; Sydney (54/55) ; calling at Fremantle, usually alternate sailings. (42/45)	At Cape Town by pre-arrangement	ONE CLASS ONLY						
								37 0 0 to 44 0 0	67 0 0 to 79 0 0	
<i>White Star Line</i> ...	Liverpool	Teneriffe (6) ; Cape Town (30) ; Albany (37) ; Adelaide (43) ; Melbourne (44) ; Sydney (49) ; Brisbane (54)	None allowed	CABIN PASSENGERS ONLY CARRIED						
								49 0 0 to 87 0 0	88 0 0 to 157 0 0	

Name of Steamship Company.	Port of Departure.	Route and Time in Days (in Brackets) between Ports.	Break of Journey.	THROUGH FARES FROM ENGLAND TO SYDNEY.					
				1st single.	1st Return.	2nd single.	2nd Return.	3rd Single.	3rd Return.
<i>Canadian-Australasian Line</i> ...	Vancouver	Honolulu (7) ; Sava (16) ; Auckland (20) ; Sydney (24)		£ s. d. 125 0 0	£ s. d. 89 0 0	£ s. d. 89 0 0	£ s. d.	£ s. d.	£ s. d.
<i>Oceanic S.S. Co.</i>	San Francisco	Honolulu (6) ; Pago Pago-Samoa (13) ; Sydney (41)	Same as Orient Line	125 0 0		89 0 0)		
<i>Union-Australasian Line</i>	San Francisco	Tahiti (10) ; Raratonga (13) ; Wellington (19) ; Sydney (24)	Same as Orient Line	125 0 0		89 0 0			

SERVICES BETWEEN FAR EAST AND AUSTRALIA.

				FARES FROM PORT OF DEPARTURE TO SYDNEY.					
				39 10 0	71 0 0	26 0 0	47 0 0	15 0 0	
<i>Australian Oriental Co.</i>	Hong Kong	Manila (3) ; Zamboanga (6) ; Darwin (11) ; Thursday Island (14) ; Townsville (17) ; Brisbane (20) ; Sydney (22)	Journey may be broken if continued by same line						
<i>Royal Packet Steam Navigation Co.</i>	Singapore	Batavia (5) ; Samarang (6) ; Sourabaya (8) ; Macassar (10) ; Bri-bane (21) ; Sydney (23) ; Melbourne (26)	Same as A.O. Line	50 0 0	90 0 0	33 10 0	60 0 0		
<i>Eastern and Australian S.S. Co.</i> ...	Yokohama	Kobe (5) ; Moji (6) ; Hong Kong (13) ; Manila (15) ; Thursday Island (29) ; Brisbane (32) ; Sydney (34) ; Melbourne (41)	Same as A.O. Line	62 10 0	112 10 0	39 10 0	71 0 0	24 0 0	
<i>Burns Philp Line</i> ...	Singapore	Batavia (2) ; Samarang (3) ; Sourabaya (4) ; Darwin (9) ; Thursday Island (11) ; Townsville (15) ; Brisbane (18) ; Sydney (20)	Same as A.O. Line	50 0 0	90 0 0	33 10 0	60 0 0		
<i>Nippon Yusen Kaisha</i>	Yokohama	Kobe (2) ; Nagasaki (6) ; Hong Kong (11) ; Manila (14) ; Thursday Island (23) ; Townsville (26) ; Brisbane (29) ; Sydney (31) ; Melbourne (37)	Same as A.O. Line	62 10 0	112 10 0	39 10 0	71 0 0	24 0 0	
<i>Ocean S.S. Co. and W.A.S. N. Co.</i>	Singapore	Batavia (2) ; Derby (8) ; Sharks Bay, alternate sailings (15) ; Fremantle (17)	Same as A.O. Line	30 0 0	54 0 0	18 0 0			

FARES TO FREMANTLE.

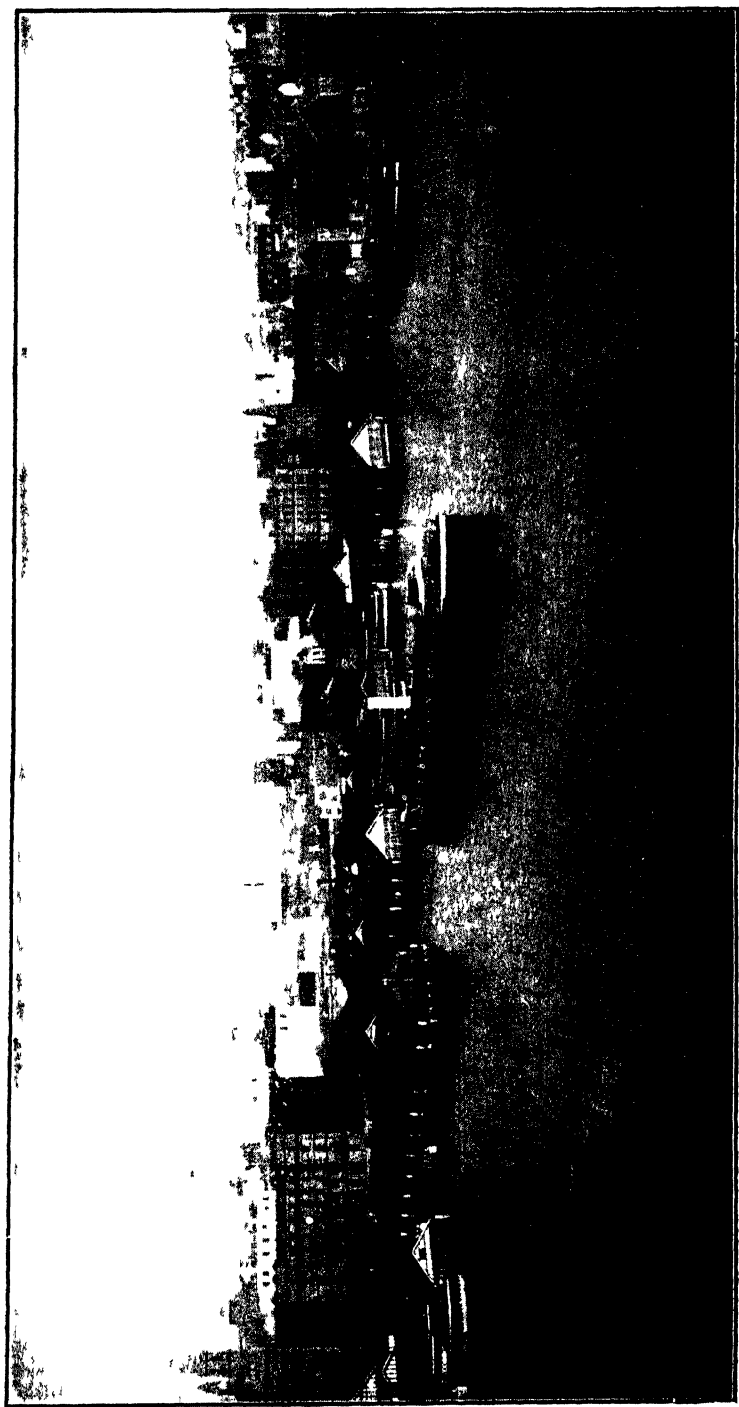
Subject to alteration).



Melbourne from the edge of Botanical Gardens



Collins Street East—the Harley Street of Melbourne



Circular Quay, Sydney, shewing ferry boat wharves

has to sail nevertheless. The loss must be made up on later voyages, and future passengers and consignors have thus to pay more for their berths and freights.

If the home consumer buys Empire products the holds are full on the homeward voyage. The dominion producer then has money to spend in the United Kingdom;—and that he *does* spend a great proportion of his cash in Great Britain is an indisputable fact. And that ensures that the holds are full on the outward trips.

With regular markets for their produce the dominions would more than ever welcome new settlers more fully to develop their countries.

So long as huge steamers are required to travel even one way with poor lading so long will freights remain high. Regular lading means cheaper transport, and a reduction in the cost of living.

Chapter III. Travel, Transport and Communication.

Transportation and communication are the first essentials to comfort, to social and business life, and to education. They are the arteries to civilization. Before proceeding to a description of Australia's resources and industries I shall indicate just how one travels throughout the Island Continent. The visitor will find that there are excellent Interstate Steamship Services maintained regularly from port to port on the western, southern and eastern coastlines. There is also a regular though less frequent service along the extreme north coast.

The coastal passenger vessels range in size up to eight thousand tons. All are equipped in the same manner as the transoceanic liners. One may travel by regular sea services right round the continent. The longest period at sea is occupied during the voyage from Albany to Adelaide—across the Australian Bight. This occupies four days. Apart from that, one is seldom more than three days at sea, and land is in sight daily. Life aboard the coastal ships is much the same as on the ocean liners. Sports and amusements serve to make the trips very pleasant interludes. Most of the passengers are Australians, and the visitor

can expect to be most hospitably treated and thoroughly to enjoy this method of travelling from State to State.

The Australian railways, which with few exceptions are government-owned, vary in point of efficiency. I think it can safely be said that those in Victoria are as splendid as any in the world. The suburban services in that State are perhaps without peer. These lines are electrified. The carriages are commodious and wonderfully furnished.

The main country, and interstate lines have their well appointed dining, observation and sleeping cars. The visitor should always travel in an observation car if available. It is set at the rear of the train and the sides are, for the most part, of clear glass.

The Victorian Railways serve as a model to the other States whose services, while being efficient, are as yet not equal to that supplied by Victoria.

In the sparsely populated areas in all States the train services are, of necessity, comparatively crude—old rolling stock is used and economy is an important consideration. But, as soon as the country districts commence to flourish, the rail services improve.

The most deplorable feature of the Australian railways is the break of gauge. The first lines were laid from the capital cities of what were then independent colonies. The engineers in each had different ideas about gauge. The day when the lines in the various colonies—now States—would link up was disregarded; and now only Victoria and South Australia have the same distance between rails. The rolling stock in New South Wales cannot use the Victoria lines and *vice versa*. Passengers must change trains, and all merchandise has to be trans-shipped at state borders. *Considerable agitation has been afoot for many years towards effecting standardisation. The present situation is ridiculous and every month's procrastination makes the task of unification more difficult and costly; because each State goes on building new lines making confusion worse confounded. One hopes that some sort of working agreement will be arrived at and put into operation before much more valuable time*

has elapsed.*

Sydney has found great difficulty in coping with suburban transportation and is now engaged upon the construction of an underground railway system and the electrification of the ordinary suburban lines which should serve to solve her problem in a few years. Street traffic is all "one way" in the chief thoroughfares. It would be impossible to deal with it under any other conditions. Buses compete with the trains with considerable success.

Sydney has a most remarkable ferry service. The suburbs are distributed all around peerless Port Jackson, but the city proper is on the south side. All traffic to, and from, the north shore is by ferries. These wonderful little vessels, carrying up to two thousand passengers—or fifty vehicles—glide over the harbour, into its dozens of delightful bays, at an astonishing speed. Rapid embarkation and disembarkation is reduced to a fine art. As many as three hundred thousand passengers are carried safely over the water daily and there has never been a serious mishap.

For seventy years, bridging the harbour has been talked about, but now the bridge is soon to be an accomplished fact. It will have a length of 3,770 feet; the length of the main arch span will be 550 yards, and the clear headway above high water will be 170 feet; the bridge will have a width of nearly 53 yards and will accommodate four lines for electric cars, six lines of vehicular traffic, and in addition, a heavy railway track. Over 50,000 tons of steel-work and about 130,000 cubic yards of concrete and masonry will be required in construction. The design and specification is by J. J. C. Bradfield, Esq., D.Sc., M.I.C.E., Chief Engineer of the Public Works Department of New South Wales. The contractors are Messrs. Dorman Long & Co., Ltd., Middlesborough, England. The cost will be about £4,218,000.

On completion, the harbour bridge will be the

* Just prior to publication of this book cabled advice reached London that an agreement which will lead to a uniform gauge throughout the Commonwealth has been—at last—arrived at.

largest of its kind in the world; and, with the system of tubes which will then be in vogue, Sydney's traffic problem should be solved.

All the six capitals and many of the large provincial cities in the Commonwealth have electric tram services. Melbourne adheres to its comfortable if antiquated cable system for use in the city and older established suburbs, but throughout the newer suburban centres a most efficient electric service is maintained. There are more than fifty miles of tram lines in and around Melbourne, whereas Sydney, which has few suburban trains, maintains over one hundred miles of tram lines.

Beyond the region of railways a net-work of motor coaches enables the traveller to reach almost any portion of the Commonwealth in comfort. These motor services are an extraordinary boon. They traverse vast areas. High-powered touring cars are generally used, each vehicle drawing a two wheeled rubber tyred trailer, piled high with mail bags, luggage and the miscellaneous merchandise required intermittently out-back. The lading of a bush coach embraces a strange conglomeration, ranging from powder and lead for the kangaroo shooter, powder and lipsalve for the squatter's wife and daughters and toys for his youngsters, to spare parts for an artesian boring plant. Over one hundred and fifty miles a day can be negotiated in comfort.

Every sheep station has its motor car—maybe three or four of them—and practically every agriculturalist once established finds a car a good investment. The motor transport of wool, wheat, and similar produce is playing an increasingly important part in the bush.

It is on the huge, open downs and plains of central Queensland that the motor waggon has—so far—proved most useful. In some districts these vehicles are serious competitors to the bullock and horse teams, and to camel transport. The dryness of a season is no hindrance to a motor truck. As most of the shearing is done at the end of the driest period of the year, scarcity of water along the bush roads may be, as we shall see, a serious—though temporary—obstacle to the

bullock, horse or camel teamster. With motor vehicles dry tracks are an advantage.

Mr. Michael Terry—a young Englishman—recently drove a car across the little explored northern portion of Australia from Winton (Queensland) to Broome in Western Australia. Mr. Terry, who was elected a Fellow of the Royal Geological Society in recognition of his most creditable exploit, has an exceedingly high opinion of the value of motor transport in the far outback, and his opinion is based on unique and practical experience.

Since the Great War the aeroplane has commenced to loom large as a means of transport in the far bush. There are now several regular services maintained, the pioneers being those in Central Queensland, and in the North West of Australia. Apart from regular routes one may hire a 'plane to go anywhere. It is almost impossible to estimate what aerial service will mean to the dweller outback. Until recent years it was practically impossible to secure the attendance of a doctor in the distant bush. Even if there was one at the nearest town, perhaps a hundred miles distant, he found it difficult to get away from his local patients for the week which might be involved in a visit. Now, where services exist, he can travel a hundred miles to a patient after breakfast, and be back in his surgery before lunch; and, what is more, he can, if needs be, bring the patient back with him. The number of lives that have been saved thuswise is considerable, and the number that will yet be saved, incalculable. The far bush must lose much of its sense of isolation, especially for women accustomed to urban life, under the beneficent auspices of aircraft. Mails are now frequent and regular in the favoured localities; the wet season does not mean, as it used, being cut off from the rest of the world—except by telephone—for two or three months. The transaction of business is facilitated and social conditions generally are improved.

Many stations off the regular air routes have landing grounds prepared in case of need. Some squatters own their own aircraft. The manager is thus able to fly over great areas of country noting the

condition of pasture and—especially—water supply, the two factors which must be kept under constant supervision.

The aeroplane is a peerless acquisition in the bush.

But one must not overlook the tortoise in singing the praises of the hare. The backbone of transport outback is the bullock or horse team, by means of which heavy haulage is done. The waggons, the rear wheels of which have a girth of over twenty feet, are built for strength rather than speed. They carry immense loads of wool from the distant shearing sheds, or wheat from the farms, to rail-head. Eighteen or twenty bullocks or horses may be used and the loads are stupendous. On the outward journeys stores are taken out for the use of the people on the stations for the ensuing year,—flour and provisions of all descriptions. But one or two such loads suffice, whereas the number of loadings towards the rail-head may exceed fifty after a single shearing. The rate of travelling is about fifteen miles a day, though horses are a good deal faster than bullocks.

The language of the bullock driver is proverbial, in the Commonwealth, for its range and eloquence. It is alleged that the bullock understands no other type of discourse. However that may be, these bullock drivers are among the stoutest fellows in the universe. A man needs to be a stout fellow when the wet season starts unexpectedly and the waggon is out on the black soil plains. The vehicle sinks into the mud up to the axles, the bullocks slither about in what is soon a sea of ooze. The driver is then heard at his best, and if an aeroplane soar overhead he may be expected to excel himself as a linguist. The only thing to be done is to turn the bullocks loose and wait, maybe a week (maybe a month) until the ground is hard enough to make the digging of the waggon out of its funk hole worth while.

The stylish suit—or costume—which I hope you are wearing, or sometimes wear, is made up largely of wool grown, most likely, in the outback of Australia. Were Bullocky Bill—all bullock drivers are called Bullocky Bills—able to conjure up a vision of Saville Row or Bond Street and were he able also to appreciate

the share of your money paid to your worthy tailor as compared with what Bill receives for his share of labour towards your sartorial adornment, surely his flight of eloquence would be an epic.

No passage of time can ever efface the debt of gratitude Australians owe to Bullocky Bill and his dumb toilers. He has done more towards developing Australia's resources than any other class of worker, and with—comparatively—little reward.

The old horse coach driver also has a considerable place in the nation's affectionate remembrance; but horse coaches, excepting in very remote localities where it does not pay to employ even a ubiquitous Ford, have been relegated to oblivion.

Camels provide transport over the dry stages at the back-of-beyond,—compared with which outback is more or less suburban. It sometimes happens that areas of excellent country are temporarily cut off from lines of communication by more or less arid spaces and, —over such localities,—camels are found to render better service than either bullocks or horses. They are used both as freight carriers and as waggon haulers. These animals are also used for transport to and from the scattered gold fields in Western Australia. But though I have travelled the Commonwealth extensively the only camels I have seen have been in zoos or circuses.

COMMUNICATION. There are splendid postal, telegraphic and telephonic services throughout the Commonwealth. Not only has nearly every station homestead its telephone, but most of the big properties are net-works of wires, all the out-stations and every boundary rider's hut being connected to the homestead.

Fifteen years ago I was on a station two hundred miles from the nearest railway and one hundred and twenty miles from the closest township and yet we knew the result of the Melbourne Cup twelve minutes after it was run nearly two thousand miles distant. The part that the telephone plays in station management will be dealt with in a subsequent chapter. Very many of the bush postal services are maintained at considerable loss. In some cases mail-men on pack horses or

camels travel hundreds of miles to isolated cattle stations with only a few dozen letters—journeys which take weeks and cost as many pounds as the government gets shillings in postal revenue. But it is the will of the Australian people that the enterprising pioneer shall not suffer the loss of this amenity of civilization.

Wireless is now coming into extensive vogue throughout the Commonwealth. Many bush dwellers have their own sending sets and with the establishment of several broadcasting stations having a wide range, the Australian in the most remote bush will soon be listening in to the news bulletin and entertainments as broadcast from the capital cities and large provincial towns. Before many years—months perhaps—have elapsed, the boundary rider in Central Queensland will doubtless be enjoying the diversions supplied, and profiting by the education imparted, from 2 L.O.!

Chapter IV. Being a Jackeroo.

It was at Corinda Station in Central Queensland that I had my introduction to life in the open-spaces—outback. I was not a city-bred youth. My home had been in the country, but in an agricultural district where the size of an individual property was seldom more than a few hundred acres. This relatively suburban life was irksome to my youthful soul! On leaving school at Melbourne I prevailed upon the powers that were to allow me to go outback. Without much trouble I secured a "jackerooship" at Corinda—the owners of which property were a large pastoral company with headquarters in Melbourne.

A jackeroo is a sort of apprentice in the pastoral industry. He is usually a town-bred youth of some education who is anxious to get first-hand experience on a large station with a view to becoming a pastoralist himself. On large properties what are known as barracks are provided close to the homestead. Here the station overseer and book-keeper—if bachelors—live, as it were, as C.O. and adjutant to a mess of jackeroos, many of whom are Englishmen, and the remainder usually lads from the Australian cities.

I travelled from Melbourne to Rockhampton on



1. Camel Transport at the Back-of-Beyond.

2. A Merino flock



This amazing load
of over 330 bags of
wheat weighing more
than 35 tons or suffi-
cient to fill four large
railway trucks was
drawn by fifteen horses



a coastal vessel, spending a day at Sydney and Brisbane—the capital of Queensland—*en voyage*. Rockhampton, now a considerable city, is the port for the Central Queensland district—a “district” four times as large as the British Isles.

The voyage from Melbourne occupied ten days. The next stage was by train to Barcaldine—a fourteen hour journey overnight in a comfortable sleeper. From Barcaldine I travelled by horse coach—soon to be scrapped in favour of a motor—to Aramac, forty miles north. I stayed that night at the homestead of a station under the same ownership as Corinda which was eighty miles further north. It so happened that fifteen thousand sheep were to be transferred to Corinda and that they were leaving the next morning. This seemed an excellent opportunity to get into harness without delay so, instead of coaching the remaining eighty miles north, I joined the drovers’ outfit. As to my experience I cannot do better than quote extracts from a letter which I wrote the next evening beside the drover’s waggon, with the aid of a hurricane lamp, to my Mother in Melbourne :—

“This is my second day. I have been in the saddle—except for two hours’ rest at lunch time—from daylight until dark. Although the sheep have progressed only about nine miles I think I have ridden nearer thirty, but I am not nearly as stiff as I had expected to be. These sheep have not had much experience at being droved and they have a deal to learn about the value of going quietly in the required direction. As yet they are inclined to dash all over the place, which is very foolish of them, but they will settle down in a day or two.

“Our outfit comprises nine men including the cook and his assistant, whose additional duty is to look after the spare horses to the number of twelve. After the sheep are droved off camp in the early morning the cook and his mate pack all gear into the waggonette, a large vehicle drawn by a pair of upstanding horses, driven by the cook. His mate—who is called the ‘horse tailer’—drives the spares. They soon catch up, and pass, the slow moving flock and in an hour or two they reach the place preselected for the next night’s camp. All the horses are hobbled and turned loose to feed. In order that they may be easily located in the small hours of the following morning, bells are strapped about the necks of a few of them. The men then set about building the enclosure in which the sheep are to spend the night. Rolls of

unbleached calico—a hundred yards or more of it—and dozens of wooden stakes are carried in the waggonette and with these a ‘yard’ is constructed without much trouble. The cook and his mate then set about preparing camp, and the evening meal. A large tent fly is drawn over the waggonette and pegged down to give shelter; and there are two small tents carried for use in case of rain.

“At present we are passing through Stainburn Station. There are—I need hardly mention—no roads, but there are fences every few miles and it takes quite a time to get fifteen thousand sheep through each gate. Drovers are required—by law—to move their sheep at least six miles a day. If they were permitted to dawdle it would be a bad lookout for the grass on the properties through which the flocks passed. All through the night there must be someone ‘on watch’; each takes a turn. Mine is from eleven o’clock until twenty minutes past twelve. I confess that being hauled out of bed in the middle of the night to do the sentry stunt round a beastly lot of sheep is not the part of droving which captivates me most, but on the whole it’s great sport.

“The drover boss is a splendid chap. During the day he rides beside me a good deal of the time and tells me all about life outback. The other fellows all of whom are bushmen don’t say much, but they are very decent to me. We are up and doing at daybreak and by the time it is properly light the sheep are on the move. They scatter a good deal until they wear the first edge off their appetites. Care must be taken to prevent their ‘boxing’—or mingling—with the sheep belonging to the stations through which we are passing. One of the drovers has to ride ahead all the time.

“It is half-past nine now. The watchman and myself are the only ones who are awake and I propose now to woo sleep as it will be a couple of hours before my ‘tour of duty’ happens along. I created a little diversion by donning pyjamas last night but that is obviously too suburban a proceeding, so I shall sleep in (most of) my clothes, as do the others, to-night I’ll give this letter to the mail coach which is due to pass us to-morrow . . . I’m having a cheery time”

The trip lasted ten days so we averaged eight miles daily. I was extraordinarily fit when I arrived at Corinda. It is interesting to record that although I had offered my services to the drover gratuitously he paid me at the rate of £2 10s. a week. It was the first money I had earned,—at least I hope I earned it! The Corinda homestead stood on rising ground some thirty feet above the surrounding level. The buildings

were in the form of a quadrangle. The residence of the manager,—hereinafter called the boss,—looked east. It had eight commodious rooms. The barracks faced north, the kitchen and servants' quarters south, and the store and administrative offices west. The buildings, which were of wood with corrugated iron roofs, were raised on piles some four feet from the ground. On top of these piles and between them and the floor joists were what appeared to be inverted milk dishes of galvanised iron. Their purpose was to "insulate" white ants which literally eat wooden buildings in some parts of Australia; but they cannot "work" unless they are in contact with the soil which, for some reason best known to themselves, they carry up into the channels which they bore through the wood as they demolish it. The "insulators" at least taxed their ingenuity, if the contrivances did not completely baffle these enterprising insects. The piles were treated with arsenic or some similar chemical to render them at least unpalatable.

The buildings were painted white, the roofs glistening over heavy coats of lime wash. The rooms were all end-to-end with wide verandahs on both sides, and all the doors were windows; that is to say, they were French windows, which permit of a maximum of ventilation. The homestead, with hot and cold water laid on, was seweraged throughout, the sewage being disposed of through a septic tank. A gas installation served all the rooms and verandahs. The whole place was furnished to achieve a maximum of comfort, and for *real* comfort commend me to the canvas verandah chairs.

The men—apart from those quartered at the barracks—lived in a group of galvanised iron huts, distant some two hundred yards from the homestead quadrangle.

On most stations if the overseer, book-keeper, horse-breaker, or any of the permanent tradesmen employees are married, a house in the vicinity of the homestead is built for their use and they live rent free. Most of the larger stations are owned by pastoral companies who control properties in various parts of

Australia. Regarding domestic arrangements, everything is provided by the owners—food, furniture, linen, glass, cutlery, and so on; and the proprietors pay the wages of all domestic servants.

I have yet to discover a married jackeroo as such, but if stockmen are sometimes more venturesome, and if their savings do not permit of their securing a small property of their own, they become boundary riders, thereby solving the housing problem. The education of children in the far bush will be dealt with under another chapter.

In front of the manager's house on Corinda was an excellent earth tennis court, made from ant heaps. These ant heaps are piles of red clay built by the industrious termites. They reach a height of from three to seven feet, and in the distance look like brown tomb-stones. It is because scraps of wood and straw are used by the ants to bind the heaps that they make such excellent top dressing for tennis courts.

At the foot of the slope fronting the barracks was an acre of vegetable garden, presided over by a genial Celestial. Of domestic servants there were three maids and a very portly—and by Jove important—cook. The manager was married and had three sons. Happily for the peace of mind of the jackeroos, he had no daughters. The eldest boy was on his vacation from the Brisbane Grammar School. The two younger lads were still in the hands of a tutor who had not long left a Melbourne college, and who lived at the barracks with the overseer, book-keeper and six jackeroos.

The station store was a captivating place. It contained at least six months' provisions to cater for the forty persons employed, or living, upon the property. It would be almost as easy to make a category of what the store did not contain as to list its contents, which ranged from flour and vegetables and all manner of canned delicacies to spare sets of harness, saddles and stockwhips—and tobacco in great quantity and variety.

Beside the book-keeper was a telephone, and close to him was a switchboard showing about twenty lines. One room in the store was devoted to the library where, to my delight, I found that there were over three

thousand volumes, ranging from the Bible and standard works to the latest best sellers.

The first meal, which I was invited to partake with the family, was a happy experience. I am no gourmand, but I confess that the way in which that dinner was cooked and served filled me with mental and physical comfort. I was afterwards to find that the same fare and practically the same service were maintained at the barracks.

To my further delight I discovered that the station had its cricket club and that everyone at the barracks played tennis. The youngsters had a well-equipped open air gym. with boxing gloves, punching ball, horizontal and parallel bars, and Roman rings. In a corner of the school room was a veritable armoury,—the youngsters' rifles and shot guns. Each informed me that he had three ponies.

I doubt if any lads in the world have a happier boyhood than those who live on a station outback.

After dinner some of the other jackeroos came over from the barracks, and we had music—from a piano and a gramophone. When the youngsters retired we played bridge for a couple of hours and went to bed about eleven o'clock. Although the days were hot, the nights were agreeably cool to the extent that one was always glad of a blanket.

An indispensable commodity in the Queensland bush in the summer time is a mosquito net, under the grateful mesh of which one can sneer at the legions of mosquitos without. They make night hideous, until one grows accustomed to the incessant if subdued whining drone. As I wooed sleep I felt that life on a sheep and cattle station bade fair to be passing pleasant. Though there was much to be done in addition to enjoying evenings occasionally at the boss's house, I had no cause to be disillusioned during the two years I spent at Corinda.

I am writing this in my office at Australia House, London. Queensland is actually very far away, but it has been strangely close during the last half hour. The memories of those enjoyable years are ever fresh and

cannot be drowned by the roar of the traffic in the Strand.

Chapter V.

A Sheep Station at Work.

Corinda, in the days that I knew it, had an area of approximately two thousand five hundred square miles! I say approximately, because no one ever seemed to know just where it ended on the far eastern side which was not fenced. That was fourteen years ago. Now it is cut up into over twenty individual properties. But what remains of the original station is still a very large holding. The greater portion of the estate was devoted to the sheep run. We shored one hundred and sixty-five thousand merinos in 1910. In addition there were about five thousand head of cattle and some seven hundred horses.

I was up betimes next morning. Breakfast was at half-past six, after which I went down to the horse yards with the overseer. On the way we called at the harness room and I was allotted my saddle, bridle and —(most important)—saddle cloth. There were about sixty horses in one of the yards, and they were a fine looking lot. I was introduced to the horse breaker, and was at much pains to impress upon him that although I was accustomed to quiet hacks I was no rough rider. Standing on the rails they ran their eyes over the horses and the overseer said, "Give him Bushranger, Black Peter, and Brolga."

For a long time the way in which these bushmen remembered horses' names was a source of wonderment to me. The boss, the overseer, and the breaker, knew the name of every animal which was broken into saddle on the station; and so did the boss's sons. But before I left Corinda even I knew at least a hundred of the animals by name. Every horse has a personality and it is by that, rather than by his markings, that he is remembered. If I saw any one of the dozens of horses, which I rode years ago at Corinda, in a baker's cart in London I should know him in an instant. But it was not easy at first and for many days I had to seek the aid of the breaker to point out the animals that had been allotted to me.

It is necessary to mention that there is no agriculture outback,—no cultivated hay, chaff or corn. The horses “do” on the natural grasses, and “do” exceedingly well. When a horse is working it has to work hard—from daylight till dark, day about with the others allotted to its rider. When they commence to shew signs of wear and tear they are turned out for a month or two’s spell. Each man on the station has four or five horses allotted to him and it is his responsibility that their condition is maintained. They are *his* horses as long as he is on the station, and if the overseer order changes to be effected, excepting by arrangement between two stockmen, serious trouble may result.

The greatest danger in so hot a climate is in respect of sore backs. That is why the saddle cloth, of heavy blanket material, is so important an item. It becomes hardened with sweat and matted hair if not regularly washed and kept soft. The efficiency of a stockman can almost be gauged by the condition of his saddle and cloth.

Practically all station work is done from horseback. Stock must be mustered for an extraordinary number of reasons. What are called fields in England are always termed paddocks in Australia. Paddocks on Corinda ranged from five thousand to thirty-five thousand acres in area, with an average of about ten thousand. A flock of five thousand sheep can be driven through a gate in about ten minutes, but in two hours they are scattered far and wide. The next time they are wanted may be for the purpose of lamb marking, or,—owing to condition of pasture,—for transfer to another paddock; or for shearing, or for some other reason. It may take a half a dozen stockmen a day,—or three days,—to effect a clean muster of a ten thousand acre paddock, and a larger area may involve a week’s work. The paddocks are dealt with in routine, therefore it must be arranged that lambing—followed by lamb marking—shall take place at certain definite periods, and so on. The method of mustering is for the stockmen to work as the spoke of a wheel with its axle at the centre of the paddock. The riders are so far apart as

seldom to see each other owing to intervening trees. They keep in touch by coo-ee-ing, by the sound of the cracks of their stockwhips, and the barking of their dogs; *apropos* which it may be said that any sort of a hound—provided he will bark—is better than no dog at all.

I well remember a couplet, perpetrated after a hard day's mustering by a fellow jackeroo, wherein he deplored, "Running when his horse turned dog, and barking when his dog turned hoarse."

Some sort of a row must be made to disturb the sheep and set them on the run, for in the long grass which clothes the paddocks it is often impossible to see them if they stay still. However, they are unused to being disturbed and are ready to make off when frightened.

If one does not possess a tyke of some description one makes what is technically described as a "tin dog," which interesting addition to the indigenous fauna is evolved by perforating the lids of tobacco tins and threading them on a loop of fencing wire. This makes a horrible din, which,—if efficacious while the novelty lasts,—seems later to amuse, and, finally, to bore the sheep. The jackeroo who invents a tin dog with a bite as well as a bark should be raised to the peerage.

It is much easier to drive five hundred sheep than it is to drive five. In a flock they will remain together and may be prevailed upon to move quietly in the required direction, but in twos or threes they are the most exasperating brutes. If there are five they go in five different directions. And when they are exhausted they lie down—tin dogs notwithstanding.

There is nothing so conducive to rage as to look down from one's sweating horse upon an old ewe which lies panting, but otherwise inert. The most gently nurtured lads have been heard to give vent to extraordinary verbosity under such auspices.

But it generally happens that one soon amasses quite a flock; the baaing attracts stragglers, and when a hundred or two have been gathered they are passed in along the line of musters to the centre of the



Sheep country Riverina, Southern New South Wales



Stud Merino Rams of a type which has yielded a year's fleece weighing over 40 lbs

paddock. Towards nightfall the animals are driven to the nearest yards.

Sheep yards are erected at intervals over the whole run—usually at the junction of four paddocks, so that one set of yards can cater for the requirements of a large area. They are constructed of timber, either of posts sunk upright in the ground—side by side—or of small round logs—one on top of another,—wired to uprights. Every yard is divided into several sections for the purpose of drafting.

The drafting is effected by running the sheep into a crush—race having—apparently—only one outlet with gates controlled by the drafter—gates which lead into three or even more yards. The crush is so narrow that the sheep cannot turn round. They must go forward. The drafting may be of weaner lambs from their mothers, or of wethers from ewes, or of fat sheep from medium conditioned. The drafter, controlling three gates with his two hands, must make up his mind quickly as to which yard each sheep must go into. He judges sex by the ear on which the station mark was clipped at lamb marking—on one ear for males and the other ear for females. Culling (or sorting) also is done while drafting. The animal with inferior wool must be turned into mutton. If the culls are not put into the paddock together at once they are marked with a splotch of red raddle for “future action,” (a phrase which clamours for use as the result of my post-war service with a government department!)

Lamb-marking is an unpleasant experience for the lambs. With their mothers they are driven into crush yards, there to be caught by hand and held up on a rail at the other side of which stands the marker. Out of one ear the station mark is punched, and out of the other the mark which will denote age. The station mark, which is registered, is a tiny notch or two. Its shape and position betoken ownership. Each station has its own device, a description of which is lodged with the Registrar General of the State.

At this stage the lamb has two very sore ears. Next it must lose its tail, which is cut off with expedition. The males have also to be emasculated. Tar is

applied to the wound.

By this time the poor lamb is sore all over.

The little animal is then put on the ground to trot weakly off to its fellows in distress. They bleat piteously until the mothers are let out to join them. One marvels by what instinct mother and lamb find each other again out of so many thousands, but it is seldom that a lamb is not reclaimed by its mother within half an hour of her being set free.

The reason the tail is cut off is that it would otherwise grow to an enormous size—being a repository for surplus fat. Tails are a positive encumbrance to grown sheep. There are other reasons, upon which it is unnecessary to elaborate, why the appendage is better removed, in the interests of the animal itself.

Lamb marking is of course cruel, but it must be done, and once the lamb has passed through the marker's hands he soon recovers; and he has a very much easier life, thereafter, than any beast of burden.

In some parts of Australia certain diseases and pests which attack sheep have to be guarded against. There is footrot for instance, to cure which each affected animal must be attended to. Where ticks are prevalent the sheep have to be "dipped." They are driven through a crush as for drafting, but at the end they topple into a tank containing a mixture which is anathema to ticks. Its chief ingredient is phenyle, the healthy, if unpleasant, odour of which pertains to the sheep for many a day thereafter.

It is obvious that only a relatively small part of a large run can be worked from the homestead, from which many of the paddocks may be distant over twenty miles. It would hardly be practical to ride to work in the morning and return for dinner at night.

At times station employees do not see the homestead for many weeks at a stretch. A camp is established at a convenient centre from which to work. The organisation of such a camp is much the same as that of a droving outfit, the impedimenta being carried on a large waggonette. All catering is in the hands of the camp cook, assisted by a gentleman called an offsider. Any man who is employed to help another

in the Australian bush is called an offsider. The term was originally applied to an assistant bullock driver who helped to control fresh animals from the "off" as opposed to the "near" side. It falls to the cook's assistant to look after the waggonette and gear as well as the spare horses.

It should be mentioned that the lot of a jackeroo—be his blood ever so blue—is exactly the same as that of the most untutored stockman, during working hours, or while camping out.

The gear carried in the waggon for an individual is restricted to what may be contained in a (not too bulky—or one runs foul of the offsider) swag. A swag might be called in England either a bundle or a valise; it is both. It contains a blanket or two, a mosquito net, a change of undergarments and socks, and a limited range of toilet equipment—toothbrush, razor, soap and towel. The whole is neatly rolled into an unbleached calico sheet and strapped securely, valisewise.

To go to bed, one rigs one's mosquito net—which is box-shaped—from four stakes driven into the ground. The sheet is then spread on Mother Earth and the blankets atop.

For a roof one has the sky above latticed over the broad branches of a gidyea, a euclypt, or some other indigenous tree. The ground is hard but one soon grows accustomed to it. Only when it rains and all hands have to crowd under the very limited tent accommodation is camping really unpleasant. The cook contrives wonderful contraptions from out the camp oven, which is really a cast iron urn. There is always plenty of fresh meat,—sheep are killed as required, and for bread one has damper—quite a palatable sort of scone, and brownie—a sweet scone, all made in the camp oven. There are dried vegetables, and all manner of tinned fruits.

The inner man has no good ground for complaint.

The musterers are generally miles from camp at mid-day. Lunch is the meat and bread one has put in his saddle pouch, and dry though it be, it is wondrous appetising after the morning's work. Of course one makes tea. If there be no water in the locality a

small supply is carried in a canvas bag worn collar fashion about the horse's neck. It is boiled in a little canister called a quart pot, carried in a leather holder attached to the saddle. Black tea is nectar if absorbed in the right setting. On Corinda we were usually not far from an artesian bore, of which more anon.

The erection of fences and stockyards and similar work seldom comes within the range of activity of the jackeroo or (other) stockmen—that is to say, on large stations. Such enterprises are generally carried out on contract by workers who prefer that type of labour. But on a small place—or when he acquires a property of his own—the jackeroo must be able to turn his hand to anything. He has ample opportunity to become a generally useful citizen of the bush if he is sufficiently interested and adaptable.

At the homestead certain tradesmen are always employed. A carpenter, a blacksmith, a saddler, and a butcher are to be found on all large stations. From these gentlemen one may learn much that is useful;—how to use carpenters' tools, how to work malleable iron, to mend harness and reline a saddle, and the *modus operandi* of killing and dressing mutton and beef. There are always several engines, windmills, and so on, to be kept in order, and if one makes friends with the engineer—who is at other times the blacksmith—the knowledge gained may be of great use later on.

Among the most picturesque figures outback are the boundary riders, who lead lonely lives, remote from their fellows. Each lives by himself—unless he is married and then perhaps he wishes he did—in a little hut far out on the run. It is his duty to look after a certain number of paddocks and the area allotted to him is governed by mileage of fencing. He usually has from fifty to eighty miles to supervise. He rides along these interminably—the general rule is that he must complete his inspection within a week. But it is not merely a matter of riding. His functions are analogous with those of a regimental medical officer at a first aid post. When he discovers a break in a fence, due to a falling tree, a fire, or a flood, he renders first aid—that is to say he patches things up.

If the damage is slight he is able properly to adjust it. If it be extensive he must get assistance after making the best of a single-handed effort. Each evening he reports by telephone to the head station. Maybe heavy rains have fallen in his district, causing floods,—maybe nothing nearly so interesting has occurred. He tells head-station what there is to be told and in exchange receives a *resumé* of the news of the outer world.

He visits the homestead store weekly or perhaps fortnightly for rations. He spends a day at the men's quarters and then rides—leading a pack horse—back into the bush. Some of these boundary riders are voracious readers; not a few of them are writers. Many have "seen better days" and have drink to thank for their isolation.

But they are all good fellows. There is a *something* in the bush which implants a spirit of camaraderie and good fellowship in the human animal, be he naturally ever so dour.

I do not wish my reader to be misled by my reference to the "ownership" of stations. In Queensland there is practically no pastoral land which is freehold. The proprietors own the *leases* of country which is subject to resumption,—at certain periods, in sections, and under clearly defined conditions,—as the needs of closer settlement require. In New South Wales there is much more freehold than in Queensland but, nevertheless, most of the pastoral land in the former State is held on lease.

On the other hand Victorian squatters more often own their own land absolutely. In the States of South and West Australia there is both freehold and leasehold, but outback throughout the Commonwealth, most of the country is held on rental, often merely nominal.

Eleven-twelfths of Australia, as a whole, is still owned by the Crown.

It is when portions of large estates are thrown open by the government for selection that our stockmen and jackeroos have an opportunity to acquire their own properties, the areas of which range from a few

hundred acres (in agricultural districts) to tens of thousands of acres,—according to locality and type of soil—outback. If the pastoral selector is known to be a reliable man with adequate experience he has but little difficulty in securing the capital necessary to stock his property. If he has been employed by a large pastoral company and has the confidence of its officers, that company frequently finances him until he is established.

But I must make it clear that for the initial two or three years the selector cannot expect anything like the comforts or amenities which are to be had at an established homestead; that is, unless he has considerable private capital. If he be wise he will put up with living in the roughest of dwellings,—something which he can himself construct out of the natural timbers,—and he will invest his available cash—and his own unstinted labour,—in the improvement of his selection, fencing and sub-dividing it, providing water supply, yard accommodation, and so on.

As to shearing—which is dealt with in detail later—he will have no need to instal a plant for many years,—if at all. What are known as “travelling sheds” will cater for his needs; the full equipment, including engines and machinery is transported from selection to selection at quite reasonable charges.

No fit man with grit regards the prospect of “starting on his own,” on a selection, with anything but delight. All his interests centre on his work. And, when work is interesting, especially if the result be to one’s own advantage, there is no fun like it. With reasonable luck he may look forward to independence in from three to five years.

This chapter would hardly be complete without reference to what one wears in the bush. I hasten to point out that red shirts and top boots are not part of the stockman’s—or jackeroo’s—wardrobe. For some obscure reason the stage Australian is generally made to appear in that extraordinary outfit.

Men who work on horseback wear elastic side boots, the “uppers” of which are rather longer than with ordinary foot ware. These boots, which have

very thin soles, are light and comfortable. With "elastic sides," if one is thrown from a horse, there is very little danger of having one's foot caught in a stirrup iron. On account of that danger half soled boots are never worn.

Very few bush riders indulge in leggings or breeches—excepting as an aftermath of war service. The type of nether garments which are most popular are either moleskin or khaki drill trousers—cut after the manner of judpores—rather loose above, and very tight below, the knees. Grey flannel or khaki shirts are most usual. A handkerchief is worn scarfwise to protect the back of the neck from the sun. A stiff brimmed felt hat of no particular style completes one's outfit. In pouches at one's belt is carried a generally useful knife, and one's pipe, when not in use.

Six-shooters on the person are conspicuous by their absence throughout the length and breadth of the All-British Continent. Differences are settled with fists if necessary, and the individual who drew a knife or gun would be given every good reason to regret his indiscretion.

As to the clothes one requires when at the home-stead, the man who has been equipped for city life will have a wardrobe which will last him for years. It is quite ridiculous for people to buy special outfits for the bush. The few particular requirements can be done without until their need is felt and then they can generally be secured on the spot, or within a week by mail. The individual leaving England who allows a colonial outfitter to advise and cater for him will perhaps find himself the possessor of a deal of useless truck.

Chapter VI. Artesian and Other Water Supply.

Nature has been exceedingly kind to a large area of Northern Australia. When the early explorers, Burke and Wills, Leichhart, and others, perished in their noble endeavours to traverse the interior of the Island Continent,—perished amid seemingly endless wastes of mocking mirages over desolate plains and dreary bush—they had no conception of the fact that

they were wandering over vast subterranean water supplies.

The artesian belt in the North Western quarter of the Continent covers—or rather underlies—about 1,200,000 square miles of land much of which at the surface, is subject periodically to droughts. That is about the area of all European Russia. I possess no scientific knowledge anent artesian water. All I know is that it is found at varying depths in a certain type of porous *strata*, and that it does not, as is often supposed, take the form of great volumes of water contained in submerged lakes. Its most astonishing and useful attribute is that once tapped—or given an outlet—it gushes to the surface in an endless stream. Obviously it must be taken in at, and have direct connection with, some watershed considerably above the level of Australia, or above that portion of the Commonwealth which it serves.

The depth from the surface of the strata—carrying water under the requisite pressure—varies from a few hundreds to thousands of feet. The twenty-eight bores on Corinda had an average depth of only three hundred and fifty feet, but there is one at Malvern Hills in another part of Queensland which goes to the extraordinary depth of—I think—over four thousand feet.

The character of the water varies with the locality. It is all more or less heavily charged with lime, magnesia or similar properties; hence some of it is very brackish. But it is all fit for human consumption and is suitable for live stock. Sometimes it possesses properties which render it undesirable for irrigation, though even in this respect I understand that counter chemical treatment renders its application to any type of plant life quite safe and beneficial.

But it is for live stock and human beings that it is so great a benefit. There is no appreciable diminution in the flow during the most severe droughts.

Artesian bores are put down by drills worked from a derrick.

Most of us are acquainted with other types of bores whom we would like to see dealt with in the same way—but that is an irrelevency.



The natural flow of an Artesian Bore





A mountain gorge in Victoria. The scenery among the mountains of Victoria, New South Wales and Queensland is ruggedly grand. Wonderful subterranean caves which for size and beauty are without peer elsewhere, are to be seen at Yarrangobilli and Jenolan.

The drill is affixed to a steel cable and, as it pulverises its way into the earth, the dust is mixed with water and pumped up by what is known as a sand pump. The steel casing, or piping, is sunk in sections around the drill as it makes its progress, and in due course water is reached—whereat there is great rejoicing among all hands, and sometimes—I grieve to relate—much consumption of alcoholic beverages. Artesian boring is done by contractors who specialize in this work. The basis of payment is something in the vicinity of £1 per foot.

Many men claim to have water divining powers. Some use a piece of fencing wire, twisted so as to be V-shaped with a loop at the apex; others use a forked green stick. They grip the implement at either end and walk about with a strained expression on their faces. They seem to be holding on to the “divining rod” as though their lives depended upon it.

They take their calling very seriously indeed.

Suddenly the rod, that is to say the apex of the V, strains downwards. The expression on the diviner's face grows intense and onlookers hold their breath. The struggle lasts for some minutes and then the fatal pronouncement is made. I confess myself to have smiled—covertly—on such occasions, but there are squatters—whose money is involved—who place the utmost reliance on some of these wizards who are, in other respects, like unto the rest of men. And it would be utterly ridiculous for me to express an opinion on the mystic art—I have none beyond feeling that many who practice it are humbugs.

I know that in the artesian belt the odds are in favour of the diviner at the outset—but when some of these gentlemen indicate the subterranean whereabouts of water in other parts of Australia where there are no surface indications—as they certainly do—one is bound to acknowledge and pay tribute to their extraordinary powers. Only it is a pity that there are so many humbugs.

The size of the artesian bore varies from two and a half to eight inches, and the resultant flow is greater or less accordingly. Some yield over a million gallons

daily, the water spurting out to a height of ten feet or more. From those which are shallow it is cold, usually about sixty degrees Fahrenheit, but the greater the depth the greater the temperature, until almost boiling point is reached.

On Corinda, the bores being shallow, most of the pipes were of small calibre—about two and a half inches. The flows from those that had been down many years were not very strong but that was due, not to any diminution in the supply, but rather to the fact that the pipes had become corroded and rusted and had silt in them.

A bore is generally put down at the intersecting fences of four paddocks. The water flows into a long galvanised iron trough running under the fence which is built—for that distance—on the top of the troughing. Thus the stock in four paddocks can be served from one trough. The residue runs to waste, causing a swamp in which thrives a particular type of reed.

Bore reeds are a vivid light green and they grow to a height of eight feet or more. They flourish only in running streams or artesian bore water. Within a few months of the flow commencing, the reeds inevitably appear, growing in great luxuriance. Their tiny seeds, covered with fluffy down, are doubtless carried in the plumage of water fowl.

Bores with a considerable outflow are usually directed into channels which wind through the paddocks, following the contours, for miles. A channel is constructed with the aid of a deep-furrowed plough. The reeds are a great nuisance. They grow so thickly as completely to block the stream. Thus it is that on well managed stations there are parallel channels some distance apart and the water is diverted from one to the other in alternate months. The dry excavation is then cleared of weeds. This prevents their doing their worst, though they are always a trouble. The advantage of channels is that the stock have not so far to go for water as in the case of the troughing.

Mention must be made of the small fish which appear in the troughs and channels even before the advent of the weeds. I have heard bushmen vow that

these little fellows—about three inches in length—come up out of the bore, but as has been mentioned, the water is often very hot and in any event it is from porous *strata*, not from subterranean channels, so it is difficult to understand how the fishes could have fared below. The fact remains that they are always in evidence, though never in great numbers.

What is known as a sub-artesian bore is one where-in the water does not rise to the level of the surface. To deal with this difficulty a specially constructed suction and force pump is inserted in the piping near the water level. This is generally worked by windmill, though sometimes by motor or steam engine.

Away from the artesian belt, if no rivers or permanent surface water holes exist, dams are constructed in suitable positions in natural water courses, or earth tanks are made by scooping an immense excavation in a situation having a good catchment. Drains are run out to direct rain water into these tanks. The excavating is done with ploughs and scoops and if the soil is porous its holding capacity is improved by driving sheep or other live stock backwards and forwards through the excavation.

The careful stock owner usually erects fences around his tanks—when complete—to prevent stock from walking into the water, fouling it and breaking down the banks. The necessary supply is pumped by windmill to a raised metal tank whence it “feeds” a trough to which live stock have access, outside the enclosure.

It is obvious that the maintenance of an adequate supply of good water is of prime importance to man and beast.

Chapter VII.

Shearing Time.

Shearing is the most important work of the year on a sheep station. At Corinda there was working accommodation for forty actual shearers though the number of men engaged at that season exceeded one hundred. Those employed within the shed embraced the Boss of the Board, the wool classer and his assistants, the engineer and machine expert, the shearers

and shed hands—rouseabouts as they are called—and the wool pressers. Outside were the overseer, stockmen and jackeroos. Other important people were the book-keeper and storeman, the cooks and their numerous offsiders, the butcher, and the teamsters, arriving and departing with their bullock and horse teams. Camped in the vicinity of the shed were travelling dealers with caravans of merchandise of various descriptions.

With the exception of the few womenfolk at the station homestead eight miles away and an occasional boundary rider's wife, there were no women within eighty miles of the shed,—and all was peace and quietude.

The wool is taken off the sheep by means of mechanically actuated shears fashioned in exactly the same way as the clippers used by a barber. I employ the term "actuated" because the shearing device is controlled and driven forward by hand. It is the actual cutting apparatus which is worked by machinery.

The shearing shed at Corinda was an enormous structure several hundred feet long, built of corrugated iron on a steel frame. The floors were of concrete throughout. The centre of the floor space was taken up by two rows of sheep pens with a passage between them. There was one pen to each two shearers, who worked in rows on opposite sides of the building, close to the walls. A few feet over their heads were the rotating shafts which actuated the machines. From these hung a flexible tube for use on the same principal as that which is applied to a dentist's tooth-boring contrivance. The difference was that, instead of boring, the shearing machines cut.

All the workers specialize. It is the shearer's duty to shear,—and nothing else. There would be no end of fuss if he picked up a fleece when he had shorn it; picking up wool is the rouseabout's job.

The sheep are driven from the outside yards into the building by the "penners-up." It is their duty to see that the shearers' pens are always full. The whole business is carried out with the precision of

clockwork. The first "run" is from six to eight o'clock. A few moments before commencing time, each man takes up his position. On the stroke of six the whistle blows, the machinery commences to whirr, and every individual in the building sets about his work. The shearer strides into the pen opposite his stand, grabs his sheep, hauls it on to the board—as the actual shearing space is called—seizes his machine and bends his back over the heavy woolled merino.

Shearers have a sort of *ju jitsu* grip, with their legs, which holds the sheep in a comfortable position so that it cannot struggle. The merino remains strangely quiet, while his coat is attacked on all sides. The wool around the belly and legs is first removed; it falls off in pieces. When the corners—so to speak—have been dealt with the arm of the shearer—who works with grim determination—commences a series of long sweeps from rump to neck and the pearly fleece rolls off expanding as it does so, into an immense ball. The rouseabout—Loppy, as he is always called—stands by, but after the first sheep is shorn he has little time for leisured contemplation. There is one rouseabout to two or three shearers. He picks up the pieces and tosses them into the centre of the fleece which is gathered up loosely and carried off to the wool rolling table, at that end of the shed which is devoted to pressing. He throws the fleece down in such a way that it spreads out over a table.

The ragged edges are torn off to be dealt with and baled separately and the fleece proper is rolled into a tight snowy ball and thrown to the wool classer. One glance from this gentleman, who is an expert of experts, suffices to determine the class of the wool which is tossed into a large truck to be baled by powerful hydraulic presses. The bales are then branded—by stencil—with the station mark and class, and the wool is ready for export. Some of it is on the teamster's waggon within a couple of hours of leaving the sheep's back and unless the contents of a bale happens to be inspected by buyers at the wool sales in one of the large cities, it is next opened, may be at Bradford—two or three months hence.

Behind the shearers are little openings leading to rows of pens outside the shed. As each sheep is shorn it is sent into one of these pens from which the shearers' "tally" is taken by the Boss of the Board after each "run." Tallies vary considerably.

A shearer who has been allotted a stand for the first time,—after several seasons' faithful service as a rouseabout,—may not average more than thirty sheep a day in his first shed. During the early stages his back aches in a fiendish manner after he has shorn a dozen, and twenty or thirty daily may be his tally for the first week. But, thereafter, the new muscles brought into play gradually stiffen; his wrists strengthen; he becomes adept at holding his sheep. His hand takes on an especial cunning, and, maybe, after three or four seasons he will be a "ringer"—or one who occasionally tops the shed's tally—with a daily average up to or even exceeding two hundred. To the best of my recollection the world's machine shearing record is three hundred and twenty-three in twelve hours. But that was a demonstration at which each sheep was caught and held in readiness for the champion, who was a Queenslander. In the old days even larger tallies are said to have been achieved by hand shears, but then the men—before the advent of union rules—worked from daylight till dark; and the fleeces were much lighter in weight. Nowadays the discipline applied by employer and union is very exacting, but it seems to be in the best interests of both parties and of the individual worker. There are few industrial troubles in shearing sheds.

It is the function of the Boss of the Board to see that the rouseabouts, who are paid a weekly wage, do their work properly and expeditiously. The shearer is his own master up to a point; he is paid by results and works with extraordinary vigour and enthusiasm. But the Boss of the Board takes care that the shearer does not ill-use the sheep. An occasional cut into the flesh is difficult to avoid, but it must be *very* occasional or the culprit loses his job—stand, as it is called in shed parlance.

If cuts are inflicted tar is applied to them and

the sheep is seldom much the worse.

Shearers are voracious eaters and one cannot wonder, in view of the energy they expend. They have their own mess and supply their own food. They also employ their cook by a *per capita* arrangement or payment, and the cook, in turn, employs his own "offsider." It is safe to say that no manual workers in any part of the world "live" as well as shearers. The best of everything obtainable in the way of fare and cooking is insisted upon regardless of price.

The rouseabout is catered for by the station owner, but with the standard set by the shearers, these shed hands take good care that they fare almost as well. There is a schedule of rations laid down by their union and, to say the least of it, it provides a remarkable range and plenitude of diet. The overseer, Boss of the Board, book-keeper, engineer and jackeroos—when at the shed—live in quarters with their own cook and messing arrangements.

There are eight meals—or at least partakings of food, indulged in daily. Before commencing work all hands have a snack which consists of tea, coffee or cocoa with scones, toast and sandwiches. Two hours' work is done before breakfast,—a substantial meal for which there is an hour's interval. Work re-commences at nine and continues until twenty-minutes past ten. There is then a spell—"smoko," as it is called. More nourishment is absorbed. Luncheon hour is from noon until one o'clock. There is one twenty minute and one half-hour smoko during the afternoon. Food and drink help the shearers and rouseabouts to keep body and soul together at each spell—work ceases at half-past five. Dinner is at six and, for those who are still peckish, there is supper always available.

The living conditions at the men's quarters are on a high plane. Health and hygiene are important matters. The meat house, for instance, must be constructed on certain definite specifications and be distant from the sleeping quarters by so many yards. The dormitories are required by law to have so much air space for each occupant; certain types of stretchers must be provided. The dining rooms also are required

to have prescribed air space. There must be water laid on and ample washing accommodation and shower baths. Shed workers are the most consistent bathers I have known. Proper lighting—usually a gas plant—is installed. There is a reading room to which the station library is transferred during shearing. A librarian is appointed. When the men get their cheques they subscribe liberally towards the purchase of books for the next season. The government subsidises £ for £ all amounts so subscribed and, as has been mentioned, the people at the homestead and the regular employees on the property have the use of the library throughout the year.

In addition to books, dozens of Australian and Home newspapers and periodicals arrive by each mail. I have seen "The Round Table" sharing popularity with the "Pink-un." The men play cricket or football, and on Sundays, or during wet weather, shooting expeditions are organised.

It is not at the shed alone that there is great activity during shearing. All over the run woolly sheep are being mustered and droved inwards; and shorn sheep are being driven back to their paddocks. Unless great care were taken all the grass for miles round the shed would be quickly eaten out, so the animals must be moved with the utmost expedition, to conserve grass near the shed. This is vital in case of heavy rains when shearing ceases, and the sheep then mustered in the shed yards, of necessity, need to be turned out to await the return of fine weather. Grass paddocks must be preserved in the vicinity in case of such an emergency. It will be seen that a great deal of organising skill has to be displayed by the overseer in keeping up a regular supply of sheep and in avoiding over-crowding. Shearers lose time—and money—in wet weather.

The rouseabouts' wages go on as usual. Lippy dearly loves rain.

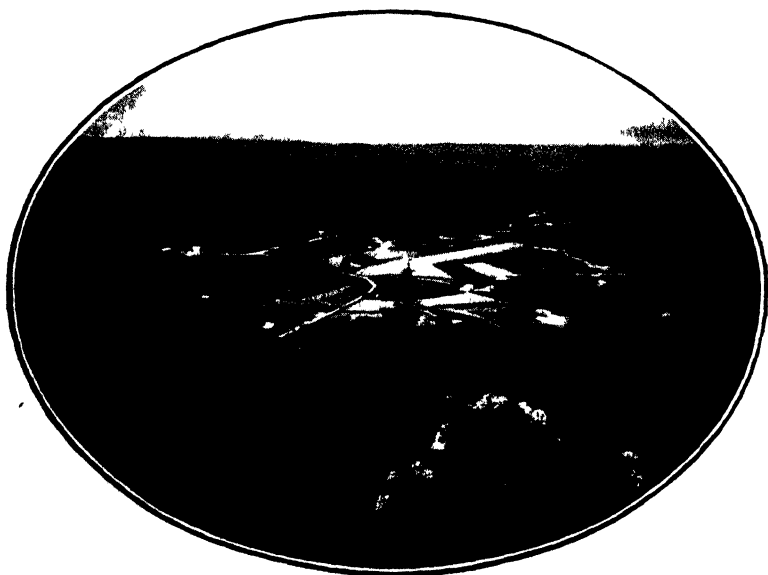
We have seen that it is a difficult matter to become a shearer until the aspirant has graduated through a school of "rouseabouting." But once he secures his first stand he is on the high road to very material



Hobart (Tasmania) in the distance, with its magnificent deep harbour



A fern fringed road Transport " ancient " and modern



Oceko Island in South Africa

prosperity—in due proportion to his capacity for hard work. He receives 38/- per hundred sheep shorn. Higher rates are paid for shearing rams and stud ewes. The adult shed-hand receives £3 16s. per week and “keep.” Boys under eighteen are paid 41/- and “keep.” Stockmen’s wages are 78/- per week, without, or 52/- with “keep.”

At Corinda the men who worked in the yards did so in unusual comfort. There was an artesian bore which yielded upwards of a million gallons a day near the shed. The water was laid on in two inch pipes to the yards, which were flooded nightly. Thus was the dust fiend defeated. Whenever a bore is in close proximity to yards this very sensible action is taken. In addition to making working conditions for men and animals more congenial, the wool is cleaner when shorn.

Most large sheds have a wool scour installed. When it leaves the sheep the wool is exceedingly greasy. Practically all fleeces are exported “in the grease” but the pieces—belly wool and “corners”—are often washed, either at the shed or elsewhere, before export. The actual scouring is done by means of hot water, with caustic soda and other chemicals. To dry the wool it is placed in perforated cylinders which rotate at great speed. The water carrying the residue of grease and dirt is driven out by centrifugal force.

Chapter VIII.

Wool and Money.

The fleeces shorn annually from full grown merinos average over eight pounds in weight. It is to be emphasised that when sheep were first introduced to Australia, about a century ago, the average fleece weighed under two pounds. Systematic culling, the introduction of the best strains and skilful breeding have more than quadrupled the weight of fleeces and, in addition, have improved the quality of the wool out of all recognition.

Fleeces of over forty pounds’ weight are now taken off selected rams, and one ram can sire a large number of lambs in a single season. Thus it is that a few high grade rams mated with ewes of only

medium class, can, provided there is systematic culling, improve a flock to an amazing extent in a few years.

I shall not attempt the task of detailing the cost of working a station. The outgoings vary from year to year to an astonishing degree. A drought may cause quadruple the outlay of the preceding year and considerable losses of live stock may be sustained. Blow-flies, fires and floods are also contingencies which increase the debit column in the owner's ledger. Wild dogs may do a deal of damage and the cost of their destruction be heavy. In the southern States rabbits have to be contended against. But, in the aggregate from year to year, the sheep owners are the most prosperous class in a country where prosperity is indeed general.

No man is advised to become a sheep owner, excepting on a very small scale, without previous experience which, if he be venturesome enough to go out back, he can easily secure. Sheep rearing cannot be taught by the book. It must be learned in the school,—and it is not a very hard school—of experience. To run a few hundred sheep as a side line to agriculture is an entirely different matter which will be dealt with in its proper place. A natural question which may arise in the reader's mind is, how much land does one require to graze one thousand sheep? It is a question impossible to answer in specific terms. Some country will carry two sheep to an acre, some not more than one sheep to five acres; some, indeed, only one to fifteen acres. But, certain it is that the smaller the holding—other things being equal—the greater the carrying capacity. It is easy to supervise a small property. It can be divided up into a large number of paddocks which may be grazed, with considerable economy in grass consumption, in routine. The man with a relatively small flock finds it worth while to conserve natural grass hay, as is done in England, or—where agriculture is carried out—artificially sown cereals or fodder grasses and plants. The experienced man of intelligence may contrive successfully to carry even three sheep to an acre thuswise. But it is not practical to teach ways and means in a book.

Droughts do not appal the squatter who knows his

business. He does not overstock his property. He always "leaves his bridges standing" and can retreat most of his flock to some more favoured district when rain refuses to fall in his own. Droughts come in cycles, with an average of one in about five years. The years of plenty more than amply compensate for losses and expenses incurred in a lean season. It is at such periods of stress that the inexperienced court ruin.

It would be impossible to over-estimate the value of the Australian wool industry to the British Empire.

At the outbreak of war Great Britain was able to rely on her dominions for about ninety per cent. of her requirements in wool, of which sixty per cent. was produced in Australia and ten per cent. in New Zealand. Soon after war broke out Australia prohibited export to other than the United Kingdom, fixed a price for the product and pooled all supplies. This was Australia's part in a concerted Imperial effort. The Empire's civilian population's needs were met, as were the immense requirements of our armies; and we were able to cater for our Allies in the form of manufactured goods.

Over the whole period of the war, prices did not advance more than seventy per cent. based on any year's purchases in Australia, and compared with 1913 prices. The value to the United Kingdom of being able to rely upon her dominions for a continuous supply of this highly essential commodity may be emphasised by pointing out that during the same period, cotton and sugar, for which Great Britain had to depend upon sources outside the Empire, advanced in price by over three hundred and about five hundred per cent. respectively. And, furthermore, there was an ever-diminishing supply of these commodities coming forward, and the consumer was entirely at the mercy of foreign speculators.

The maximum yield of wool throughout the Commonwealth in any one season was in 1919/20 when nearly 684 million pounds' weight was produced. The record number of sheep was in 1891 when over 106 million animals were shorn. Last year there were under 80 million sheep in Australia but this does not

indicate that the industry is on the wane, because the sheep are of a very much higher class and the amount of the wool yield last year was in excess of that cut when many more sheep passed through the sheds.

The area devoted to sheep stations is upwards of 300 million acres. Merinos represent 71 per cent. of the flocks, cross-breds and other types, 29 per cent. Sheep are raised in every State. In 1923 the distribution—in millions—was: New South Wales, thirty-three,—Queensland, eighteen,—Victoria, twelve,—South Australia, six,—Western Australia, seven,—and Tasmania, one and a half. Although my description of station life is the result of my experience in Queensland, the same principles of management apply in all parts of the Commonwealth.

Only 3 per cent. of wool is used locally, the number of people employed in woollen mills being slightly in excess of six thousand. Practically all Australian wool is purchased by overseas buyers in the wool exchanges at Sydney, Melbourne, Brisbane, Adelaide and Perth. Sales also take place at Albury (New South Wales), Geelong (Victoria), and Hobart (Tasmania).

It is interesting to note that of a total value of approximately £200 million worth of wool sent out of Australia from 1917 to 1922, £132 million worth came to Great Britain.

It is difficult to estimate the potential sheep carrying capacity of the Commonwealth. There has been no dearth of land for this rural enterprise. As we have seen, an individual property may carry only one sheep to five acres; whereas if it be sub-divided, cultivated and generally improved, its carrying capacity may be quadrupled.

But there is so much good land available that there has as yet been little necessity for the economic exploitation of poorer types of soils. The cattle raising industry in Australia has been subject to many vicissitudes of recent years and much land hitherto devoted to cattle has been transformed into sheep runs. On the other hand each year large sheep stations are sub-divided for agriculture. But the wheat farmer almost

invariably owns sheep, as will be seen in the chapter devoted to agriculture.

The yield and quality of Australian wool continue to increase and improve in proportion to the greater distribution of the best breeding strains throughout the Commonwealth. The industry must be destined to have an even greater future than it has had a past history.

Chapter IX.

Life on Cattle Stations.

The cattle run on Corinda was at the northern end of the property. The animals were dealt with as from what is termed an out-station, distant some fifty miles from the homestead. This out-station was called Uanda, and at the busy seasons of the cattle-year, some of the jackeroos were temporarily transferred thither. Cattle men have a harder and more venturesome life than those who work among sheep. They rather despise "them shepherds who wear collars and ties, and can't sleep unless they're in a feather bed." The jackeroo on arrival at Uanda was subject to a deal of banter.

"What do yer do when a lamb bites yer?" a cattle man asked with concern. "It must be aw-ful!"—and then he added, "I hope yer didn't forgit your umbrella and goloshers."

The work among cattle is much faster than with sheep, and one is required to be a very good horseman and to be well mounted. Mustering is carried out under the supervision of men who know the country. To "know the country" means to know where the cattle are to be found at various seasons. On large holdings there are few fences, and paddocks—if fenced at all—are of an immense area. The cattle have regular haunts. Before mustering, the permanent stockmen ride over the countryside "picking up tracks" until the approximate whereabouts of the various herds are discovered. Mustering soon follows. The animals are very timid and take a considerable amount of "holding" when first disturbed. The wildest of them dash into the scrubs and if they are not driven on to the open country, the rest follow, and that herd is soon

lost. This is when one shows his prowess at "scrub dashing."

When I was on my way to my first cattle muster an old hand gave me a little useful advice. "Yer'll need ter take that there shirt off when yer get inter the scrubs."

"Why?" I asked out of my native innocence.

"Well," he confided, "yer see, yer skin'll heal up, but yer shirt won't."

One relies almost entirely on one's mount when after a beast in the dense bush. The horse knows what is expected of him—that he is required to overhaul the bullock and drive him on to clear ground. One's horse is "given his head" and the jackeroo becomes more than usually contrite for past sins—at least *one* jackeroo did. The rate at which tree trunks and overhanging branches swept past was a revelation. Sundry pieces of shirt—and epidermis—adhered to the rough bark and projecting branches and sticks, but nothing worse happened. After my first effort I congratulated my mount and he seemed pleased. One *may* ride in a hunting saddle on a sheep station, but among cattle what is known as a stock saddle with large knee pads is almost invariably used. Those knee pads are a considerable consolation.

The purpose of a muster may be for the sale of selected animals or maybe it is for branding. For the former purpose cattle are seldom taken to the yards. The herd is driven on to a clear patch of country and "cutting out" commences. The head stockmen—or the purchaser—indicates the animals he selects, and a rider sets out after each, galloping on the bullock's heels until he is driven out of the herd to form one of another mob comprised of those so "cut out." The herds are kept—more or less—stationary some hundreds of yards apart.

It is exciting work, and strenuous. The Australian seldom, if ever, uses a lasso. He relies upon his stockwhip, which he cracks continuously on all sides of the beast he is driving—thereby making the animal maintain the right direction. If the bullock ignores the pistol-like reports, the whip is brought into contact

with his hide, and he remembers what it is like for the rest of his life. These whips, attached to short handles, are from eight to fourteen feet in length and the cattle-man can perform prodigious feats with them, such as snicking the end off the cigarette of a contemplative jackeroo or neatly cutting the head off a snake, and similar drolleries.

If it is necessary to throw a bullock in the open the Australian does not have recourse to a rope—or to wrestling. He gallops beside the bovine, leans over and takes a grip of its tail close to the body. A single twist—if properly applied—of this appendage, sends the beast sprawling on his side. After two or three such spills he can be roped, more or less leisurely, for any purpose.

At branding time the herds are usually droved to immense stockyards where they are drafted—one man controlling each gate leading out of the crush pen—and the head stockman directing operations from the top of the rails.

Calves are branded and ear-marked—and the males emasculated—when about four months old; some may be older or younger, but that is the usual age for such work. They are drafted from their mothers into separate yards where the small ones are caught and thrown by hand. Two men hold each beast down, one at the head and one in charge of the hind legs. The hot brands are then applied to the rump. These brands are registered as in the case of the ear marks on sheep. The calf also is ear marked, but he is more fortunate than the lamb in that he retains his tail. Larger calves need to be roped, and some of the young bulls make the yard no place for a sluggard.

It is hot, heavy, tiring toil, but there is much animation about all cattle work, and every stockman worth his salt, and most of them are worth watching at work—and worth knowing—agrees with Adam Lindsay Gordon in saying—

“’Twas merry, ’mid the blackwoods
When we spied the station roofs
To wheel the wild scrub cattle at the yard,

With a running fire of stockwhips,
And a fiery run of hoofs.

Oh! the hardest day was never then too hard!"

The cattle man does not fare nearly so well in the domestic sense as the herder of sheep. In the first place he has little fresh meat. There are usually no sheep available for mutton, and the beef from a single bullock takes a tremendous lot of eating. The greater portion of it is salted. A cattle station has little contact with the outside world. The homestead furnishings are not as comfortable as on a sheep station;—in a word—the cattle owner is not so prosperous as the sheep man.

Cattle droving is quite likely to provide one with an experience which stands out boldly in one's recollections. The following is a letter which I wrote in 1911 after my début as a cattle drover:—

"Four hundred bullocks were recently sold from Corinda to a Meat Export Company a few hundred miles north of the station. When the drover arrived to take delivery one of his men was ill and had to be sent to hospital, and the Manager allowed me to take the sick man's place.

"The personnel of the outfit,—plant, as it is termed,—comprised the drover boss, two other men, and myself. One of the others, in addition to being cook, was required to look after the spare mounts. We had three pack horses to carry our paraphernalia, and three riding horses each. This plant is much less elaborate than a sheep drover's. We were not able to carry much on the pack saddles—our four swags, some food, billies* and canvas water bags, made as much as the horses could conveniently take.

"The commissariat was not very varied. Salt meat, johnnie cakes, or damper, and jam was the ever-recurring menu. A johnnie cake is the small brother of a damper which is concocted—in the absence of a camp oven—as follows: the cook spreads a piece of canvas on the ground, puts a few pints of flour in the middle of it with a sprinkling of baking soda, cream of tartar, and salt, and makes a dough with water. Half-a-dozen pieces are broken off for johnnie cakes and the remainder is rolled into a flat loaf. A hole is made in the middle of the fire and the dough is thrown in and covered over—with ashes. The johnnie cakes are cooked on top of the coals, but the damper remains in the fire for an hour or more. The corned beef is boiled until the cook thinks it is done; he is not always a good guesser.

* Tin canisters in which to cook, or to boil water.



Herefords on Coochin Station, Queensland The Prince of Wales when in Australia, spent a holiday on this estate



Representative of the "Big Scrub Country," Queensland and New South Wales.

"Cattle are much easier to drove than sheep. By eleven o'clock in the morning they have travelled some five or six of the eight or ten miles to be traversed between daylight and dark, and are then ready to rest for two or three hours during the heat of the day.

"The country through which we passed was sandy and very heavily though coarsely grassed. At times we could see only the bullocks' backs for miles at a stretch. As a general rule there was water for the animals each day, but it was not always convenient to camp near it. In such cases we had to carry a supply, for our own use, in canvas bags. We could not take any great quantity and, after tea had been made and the meat boiled, there was not very much for ablutionary purposes. We had not a dish, so ablutions were difficult at best. To wash one took the soap in his hands, of which he did his best to make a tiny reservoir, into which another fellow poured a little of the precious liquid.

"This was worked up into a lather—an exceedingly dirty lather—which softened the dirt, and a little more water dislodged some of it. Then the balance of perhaps half-a-pint was conveyed in the palms to one's face, and a rub with a towel clinched the operation.

"Watering a large mob of cattle at a small water hole is a delicate operation. If they are not carefully handled they rush at it, those behind forcing the foremost right across before they have time to drink, and the mud becomes so stirred up that the water is hardly fit even for a beast. The difficulty is overcome by splitting the herd up into small lots about a mile from where the water is situate. These are driven forward in turn and prevented from walking in and fouling the dam, creek, or lagoon, as the case may be.

"Towards evening the cook goes ahead to prepare supper—after selecting a suitable camp which should be near to a clear, level, piece of ground. When it is nearly dark the cattle are rounded up into a compact mob on the clear space. They must be watched by a horseman all night.

"My 'tour' was from ten till one o'clock. The men's camp is always a couple of hundred yards from where the cattle are resting. On being called one soliloquises briefly on the cussedness of things in general and of cattle droving in particular, mounts a horse tethered in readiness, and rides quietly to the relief of the previous watchman.

"Night watching is a dreary business. In summer the mosquitoes are exceedingly industrious, and in mid-winter it is beastly cold. One rides quietly round and round the herd. The animals as a rule, camp quietly, provided nothing disturbs them, but the watchman must be very careful. He dare not crack a whip, and to strike a match to light his pipe would be disastrous. He must be very particular not to make a noise with his stirrup irons, and that his horse does not stumble over a log.

"Occasionally a few of the animals become restless or peckish, and are inclined to wander off camp. These must be turned back with as little fuss as possible. What is most to be feared is a rush or stampede. Recently over a thousand bullocks stampeded in this district and carried away about two hundred yards of fencing—two miles from where they broke camp! Many of them were killed, and many seriously injured. Drovers do not hanker after that kind of excitement. When the cattle are restless and one has to keep a very sharp lookout, the time passes quickly, but when they are quiet and everything is still, the watch is painfully slow in passing. It is when the cattle are quietest that a stampede is most to be feared. If they get a fright,—or if one of them does, and suddenly jumps up, rousing all the others—they are off in quick time.

"The second last night of our trip I shall not be likely to forget. It was bitterly cold and the cattle were camping very quietly. There was no noticeable sound except the heavy breathing of the slumbering mob. The camp was in the middle of a little clear spot with heavily timbered country all around. On one side was Torren's Creek; on the other, a ti-tree scrub. The moon was up for the first hour of my watch but when it went down the darkness was intense. Everything was still. Occasionally the mournful cry of a curlew, the weird hoot of an owl, or the faraway howl of a dingo broke the hush of the bush; otherwise nature seemed at rest. I had not known the cattle to be so quiet before. I was very cold, but to get off and walk around was out of the question as, although the cattle were accustomed to horsemen, a pedestrian might startle them and cause a stampede.

"Suddenly, for no apparent reason, the worst happened.

"In the event of a rush the only way to stop the animals is to set them 'ringing,' that is, the outside ones wheeling around the central portion of the herd. I tried to do this by galloping across in front of them, shouting and cracking my whip. But I could not manage it. Of a sudden I noticed that I was on the edge of the creek with the terrified bullocks charging straight at me;—not that those in front would not have turned back if they could have done so; they were forced forward willy-nilly.

"It was rather awkward, but I turned my horse down the bank and trusted to luck that we would get safely across. He negotiated the steep creek side safely and there was only shallow water in the bed;—but my mount did not know it was shallow and propped. I too tried to 'prop,' but tried in vain, and I landed head first in the creek. I did not linger there. Scrambling up the far side I climbed a coolibar tree with creditable speed.

"The next instant the creek bed and banks on either

side were a seething mass. It was pandemonium. The ground below me was a billowing, bellowing, mix-up. I could not see anything distinctly but the row was certainly impressive.

"In a few minutes the frightened brutes had passed, only those which were disabled being left behind. I descended from my perch—although sopping wet I had forgotten about the cold—and ran back to camp. The Boss had taken the relief horse and had galloped across the creek to try to stop the cattle on the other side. The other drovers had caught two more horses and followed him, but as we did not have a spare saddle or bridle I had to cool my heels at the camp.

"At daybreak one of the men rode up with the news that the animals were feeding quietly on a broad plain some four miles away. After counting them it was found that fifteen were missing; but twelve were recovered during the day, and one was smothered in the creek; the others were probably killed in the scrub, and only three were lost in all.

"Under the circumstances the losses might have been much greater. My horse was found near the camp after daylight. The saddle was rather knocked about, but not seriously damaged.

"It may be of interest to know that the drover boss receives from one shilling to two shillings and sixpence per head per one hundred miles, according to the distance to be travelled. The men are paid about two pounds ten shillings per week."

To the best of my recollection they earned their money. Nowadays the contract rates and wages are doubtless higher.

Chapter X. Meat and Discouragement!

In so far as the wool industry is concerned Australia, as we have seen, is in a happy position. She produces more of this highly essential commodity than any other country, and spinners of all nations vie with one another in competing for supplies. It has been proved in no indefinite fashion that in time of Imperial stress the people of the Commonwealth do not hesitate to sacrifice their commercial advantage in respect of wool to ensure that the citizens of the Empire shall have ample supplies at reasonable prices.

But Australia is not in the same happy position in regard to any other commodity which her people produce.

As to the meat trade, it is the irony of fate that it was an Australian, the late James Harrison, who first devised the means of making ice by chemicals, and that it should have been other enterprising Australians who proved to the world that meat might be frozen and carried for almost indefinite periods at sea, without deleterious effects. The reason these facts are ironical is that other countries outside the Empire have reaped the benefit of the work of these pioneers.

Of recent years the beef industry in the Commonwealth has been in a parlous state. Men who owned immense herds of beautiful cattle—herds that had been established after decades of outlay of capital and labour by the owners and their fathers before them—were at the same time on the verge of bankruptcy. Two years ago the industry was in such sore straits that the Commonwealth government had to step in and subsidize exports, paying a farthing to the grower for every pound of beef exported.

The people of the United Kingdom have short memories, but let me recall the meat queues of the later war period—the fruits of relying upon the tender mercies of the foreign meat producer. Once more I must emphasise the contrast in regard to wool, in respect of which the people of Great Britain were able to look within the Empire for all their needs. It is not too much to say that if the position in relation to meat, wheat, cotton and other vital necessities had been the same as it was with wool, there would probably have been no Great War. It is an indisputable fact that our late enemies were confident that they would be able to starve the folks in the Homeland into surrender, and then——.

That they did not succeed was due to the spirit of the Britisher, with which the enemy had not properly reckoned. But it was a close shave—how close but few know!

And in regard to meat, there are hundreds of millions of acres of British territory in Australia alone on which limitless herds can be reared to supply far more than the needs of the citizens of the whole of the British Commonwealth of nations. *And in time of*

Imperial stress a price would be fixed, and exports outside the British Empire would be prohibited!

The natural question is—why do not the Australians proceed at once to build up their herds to those vast proportions? And the unfortunate answer is—because they cannot sell what they already produce. The only market for meat—other than a little which goes to the East—is in England, and the citizens of the Homeland buy from Argentine and America! It is not that Australia is not able—despite the greater distances from, and heavier freight to, the United Kingdom—to market meat in London more cheaply than do foreign countries. It is the absence of a *stabilized market* which militates so seriously against the Australian producer. The machinations of foreign control are such that—unless the consumers individually determine to support the Empire producers—Empire meat can be undersold whenever it threatens seriously to compete with that from sources outside the Empire.

About four years is required to bring a bullock to maturity. Then great expense is incurred in marketing the meat twelve thousand miles from its country of origin. One serious set-back not only disheartens those already engaged in the industry, but serves as a warning to others to invest their money and labour in some other enterprise. But if consumers in the United Kingdom supported home-grown meat first, and, as a second choice, demanded meat produced within the Empire, the Australians and producers in other dominions would take heart, and the industry within the Imperial Realm at Home and overseas would, in the course of a few years, control the Empire markets—a consummation which surely is devoutly to be wished.

In regard to mutton and lamb, Australia is in a better position, but once again the consumer, if not able to buy mutton and lamb grown in Great Britain, should insist on getting those commodities from an Empire source. That I have not devoted more space to the economic aspect of the meat trade is not to be taken as a criterion of its importance—or unimportance.

If I embrace in my book too much that savours of statistics and economics the people I want to interest will not read it.

It would be as well if the reader turned back to the Important Foreword and re-read that portion which deals with meat, wherein it was shewn that, in respect of frozen beef alone the consumers in the United Kingdom were out of pocket by over £10 million in four years because they did not, in fact, secure the whole of their needs in meat from within the Empire at the price paid for the quota which did come from Imperial sources, and it was during those four years that Australian cattlemen, despite their large herds of bullocks, were on the verge of ruin.

It must be mentioned that great damage had been done to the Commonwealth's meat trade in England by the post-war retail disposals of Australian frozen beef.

Australia had been urged by the Imperial Government to ship the greatest possible amount of meat to help cater for the immense requirements of the fighting forces. Meat works' proprietors increased their plants and cold storage accommodation to fulfil Imperial needs. But much of the capital thus outlayed in war time is proving—to-day—to be anything but a profitable investment.

Despite the greatly increased output which then resulted, shipping space was at times almost impossible to be secured, and it was, therefore, inevitable that much of the frozen meat was held for relatively long periods in cold storage before shipment. But it was the still more lengthy storage—which was no doubt necessary—in England that led to most unfortunate results. The post-war disposals for civilian purchase of this "Australian frozen beef" did not create a very favourable impression with consumers. The product had, naturally, suffered as the result of many months in storage and excessive handling.

It seldom occurred to the retailer, even if he were aware of the circumstances, to explain them to the purchaser who too often was dissatisfied with his purchase.

The Commonwealth suffered most unjustly on this account. Australia produces as good meat as any other country, and she ships a high-class quality. Her traders know that it does not pay to ship anything but a good article. There is a very rigid Government veterinary examination of all meat—whether slaughtered for local use or for export.

Matters cannot be adjusted in a day. Empire meat producing activities have received a severe setback, but in all commonsense surely the consumers should rally to their own people—to their mutual advantage.

Remember the meat queues, remember the potentialities of meat production within the Empire, and remember, finally, that it is the consumer in the United Kingdom who has the power to ensure their proper development.

Whatever difficulty may be met in identifying raw meat, nothing of the kind confronts the purchaser of the canned Australian product, which for excellence is unrivalled by similar goods from any part of the world. The tins are all labelled to show that the contents come from the Commonwealth.

I have before me another letter written from Corinda during my first winter in Queensland. It describes a meat-canning works that I had visited and, although the methods then in use have now been greatly improved the general principles are the same. As the letter described my impressions recorded at the time of exactly what I saw, I quote it in *extenso* :

"The works are situate at a place called Booraman on Torren's Creek, some two hundred miles west of Townsville. This is in the heart of a country of large cattle stations and, once out of the small town, one may travel forty or fifty miles without seeing a habitation of any kind. About a hundred cattle are yarded each morning. The killing pen has a concrete floor and heavy sliding doors which lead out on to what is called the dressing floor. Half a dozen beasts are penned at a time and the slaughterman, spear in hand, mounts a bridge-way overhead. The spear consists of a sort of chisel fixed to the end of a pole some seven feet long. There is no get-away for the bullocks, and a well-directed stab at the back of the head severs the spinal cord, and kills each beast instantly. The doors are slid back, chains are

attached to the legs, and the carcasses are hauled by windlass out on to the dressing floor where the skinning commences.

"The skins literally peel off, and in a few minutes the carcasses are dressed, or more accurately undressed! They are hauled up on to running hooks which slide down the centre of the building where they are left to cool before being cut up. There is a Commonwealth inspector who examines every carcass and if he considers the beast to have been unhealthy or the meat otherwise unfit for human consumption he condemns it, and not any of it is tinned. This seems to be rather an improvement on what one reads of the Chicago meat works—according to Upton Sinclair. The condemned meat is not wasted as it is turned into fertilizer.

"All the floors, which are of concrete, are thoroughly sluiced down at frequent intervals. The blood and etceteras run into little gutters which carry them to a receptacle tank, whence the product is carted to be dried. Afterwards it, too, helps to make the fertilizer all it should be.

"The heads, after the tongues have been removed, and the horns, which somebody buys—and turns into something, somewhere—are chopped off; and the legs, minus the hoofs for glue makers, are taken to what is known as the boiling down. The intestines are thoroughly cleaned and packed away in salt, subsequently to be exported to Germany, there to be filled with sausage meat!

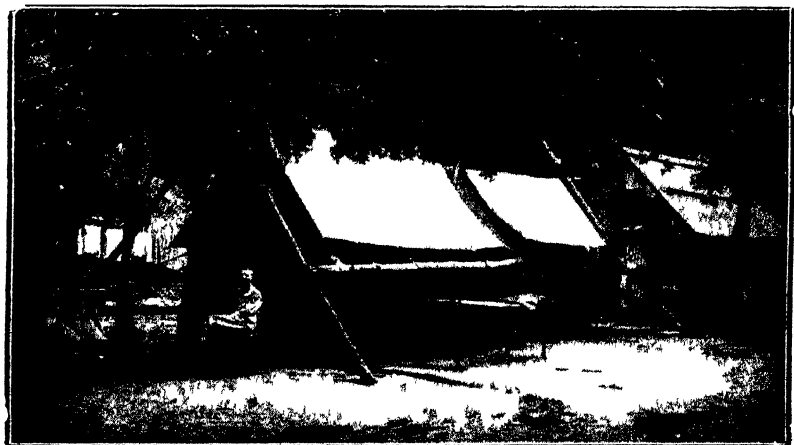
"The carcass when 'set' is attacked by the cutters-up, who are experts in bovine anatomy. It is cut into sixteen pieces in a very short time; these are flung to the boners, who remove every particle of meat in an incredibly few slices. The bones are thrown on to one truck for boiling down, and the meat on another which conveys it to the cooking house, where it is placed in large perforated tanks. These are let down into huge cauldrons of water which is kept on the boil by steam pipes. When the meat is cooked to a certain extent the perforated tank is lifted out of the cauldron by mechanical means. The steaming beef is tipped on to large tables where more cutters sort it out, chopping it into small pieces to be filled into six-pound cans.

"The little round piece of tin which you have seen at the end of such cans covers the hole through which the meat was rammed by a machine. Then the lid, stamped out to fit with a slight overlap, is dropped on and the tins pass to a revolving stand where they are soldered by an ingenious process.

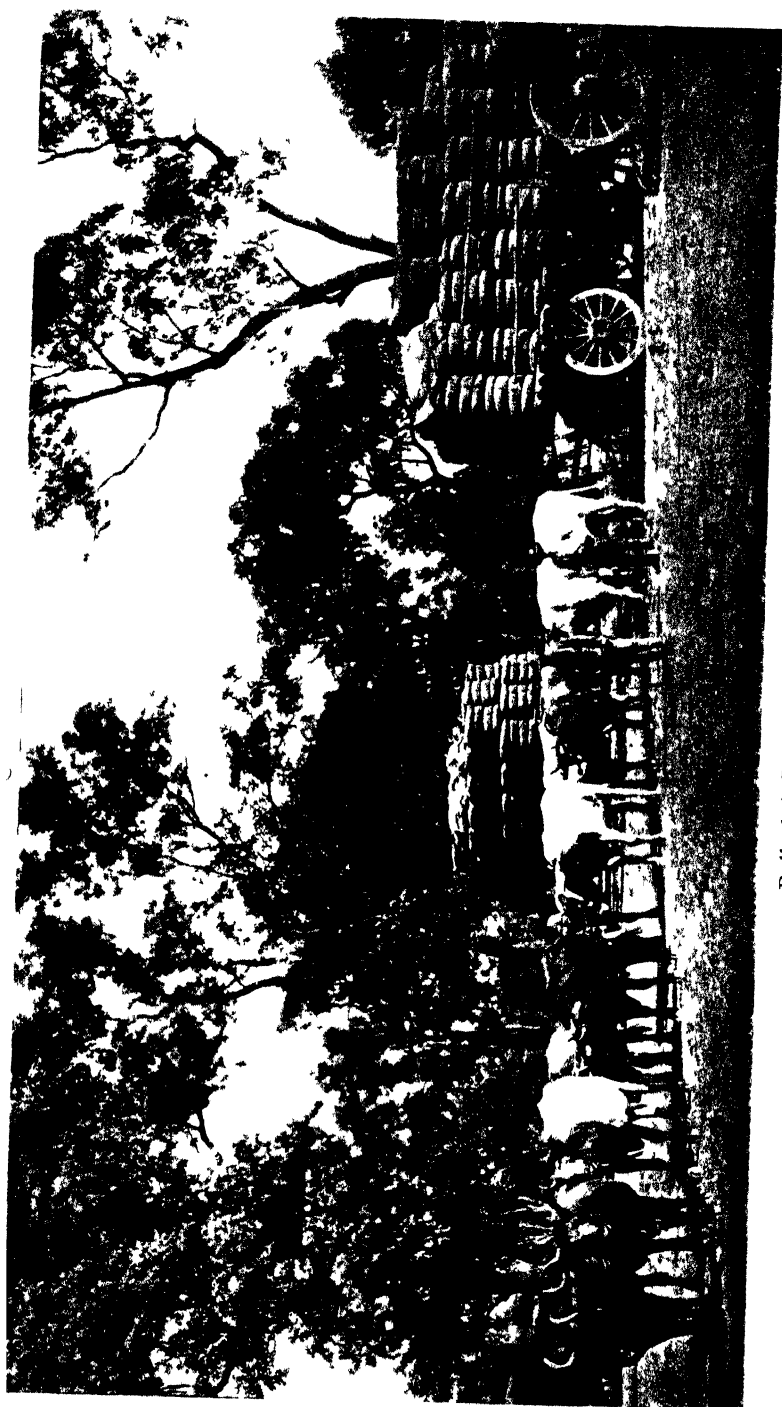
"The meat is now re-cooked in steam-filled ovens, and when the contents of the tin are brought to boiling point, a tiny hole is punched at the bottom to let out any imprisoned air so that the meat may be preserved in a *vacuum*. It is immediately sealed with a single drop of solder and the contents are again brought to boiling point in the steam-filled ovens.



Commonwealth Bank Sydney and by way of contrast



A settler's first home in the Tropics of Queensland



Bullocks' Team—Carting Wool

That completes the process. *No chemicals* whatever are used in the preserving. Reliance is placed on the vacuum.

"The product is all exported overseas, where it is used for making up dishes of the curry and stew variety.

"The tongues are dealt with separately as they require more careful handling. The extract in which the meat was boiled is necessarily splendid stuff, and after several lots of meat have been cooked in it, is reduced to a very concentrated state, like molasses in appearance. This is packed in casks and subsequently disposed of as meat extract.

"The waste meat, legs, heads, and other residue are thrown into great coppers, where they boil until every vestige of fat has become thoroughly dispersed and risen to the surface;—this is the boiling down referred to above. It is cooled, skimmed off, clarified, and packed into casks for export. The best portions of the bones are cut out with a circular saw and sent to various parts of the world to be made into knife handles and divers other commodities. Smaller bones are crushed and put into the fertilizer.

"All the packing cases, tins, and casks are made at a factory adjoining the works.

"There are many other meat preserving factories in Queensland, most of which are conducted on a much more elaborate scale, but the same general principles apply throughout the industry."

Chapter XI. Horsebreaking and Rough Riding.

Horsebreaking is an important work in the bush. On large stations a breaker is permanently engaged, and his is a strenuous occupation which would be dangerous for other than a skilled man. Once a horse can be saddled and mounted by an ordinary stockman, he is broken in. Later on maybe he is taught to wear harness, and that his function in life is *not* to kick vehicles into small pieces. But few station horses are required for other than riding purposes.

The animals' first acquaintance with men is not pleasant as on that occasion they are thrown and branded—and the males gelded. They are more fortunate than calves, in that their ears remain intact, and than lambs in that they retain their tails. A horse's tail is, in fact, one of his few solaces when the flies are bad.

The brands are much smaller than those used for cattle, and for horses they are made of copper. But

in addition to the station mark of identification, each beast is numbered by brand. At the same time he is given a name, and that and his colour and breeding are entered in the station register. Be it said that the animal is not *branded* with his name,—for which a colt called Casabianca had reason to be thankful.

Our colt (or filly) has this experience when he is a yearling or thereabouts. Thereafter he may scamper round and enjoy himself for another year or two. But he has learnt to regard mankind in general with detestation; and the next time he is yarded he feels—not without reason—that he is in for a memorable time. He is run into the high railed enclosures with quiet horses, and presently is drafted into a small round yard having rails so high as to render the thought of jumping them out of the question. Incidentally they cannot be knocked down. The horse-breaker surveys him appraisingly from the top of the fence. Our colt dashes round in a frenzied circle,—until he is tired.

Presently the breaker climbs down into the yard. In his hand he carries a light pole to the end of which is tied a piece of sacking. The colt's first impulse is probably to kick and trample on the breaker, but if he tries to do so, he finds himself thwarted by the sacking which is thrown over his eyes. In any event the breaker is an expert at scrambling up the rails in times of stress.

By degrees the colt becomes weary; and presently he is trotting round and round the yard trying—in vain—to get away from the objectionable sacking which now dangles about his neck and withers, and along his back. All this time the breaker carries on a one-sided conversation in a consoling, reassuring tone. By degrees it dawns on the youngster that the sacking does not hurt, that it is in fact quite harmless; and that trotting round and round a yard while the breaker stands still and imperturbed in the centre, is a tiring business, and most unsatisfactory. In due course our colt stands still—bathed in sweat—not at all hurt and feeling rather foolish. He now allows himself to be stroked all over with the—not quite so hateful—sacking.

Hereabouts a third party enters the lists in the shape of a quiet old mare which the breaker mounts; and she knows her business. The youngster again commences to circle the yard at a trot; but the mare keeps alongside. The breaker drops his hand on the colt's shoulder and as they move round he strokes the frightened animal reassuringly. As in the first episode, the youngster presently slackens pace to a walk and, eventually, stands still. Realization comes gradually that the breaker's hand is not hurtful—rather is it kindly and its owner very patient and good tempered.

But the horsebreaker up to this stage is rather a hypocrite. His cajoling is full of ulterior motive which is soon apparent.

A halter is next brought into the business. It is made of plaited green-hide, with a ten foot rope of the same material, and it is unbelievably strong. With its running noose round the jaw, it is slipped over the youngster's head and drawn taut, and the circus recommences. Both horses gallop, canter, trot, walk, round the yard. The halter rope is kept taut but without undue strain upon it.

Then the youngster decides to stand still. But the breaker has other ideas. The mare, like Mr. Pat Sullivan's immortal creation, keeps on walking. The strain on the rope increases; the colt backs, and rears,—and bumps into the fence. Sometimes he throws himself on to the ground—and gets up again. The strain on the rope is constantly maintained. A plunge forward—not to please the breaker, but in sheer desperation—causes the strain to lessen.

This is a good idea!

Soon the colt is being led,—all one way at first, then backwards and forwards, and in figures of eight.

The old mare is now dispensed with and the breaker proceeds to haul his pupil in all directions. He is not always successful, but persistence wins through. The gate is opened and a larger yard is entered. The youngster takes heart, but he cannot get rid of the halter—or the strain. He gives the breaker a lot of exercise, but the man's arms and legs have a power of endurance that wears down opposition. If

a colt could gallop backwards or sideways, teaching him to be led would present much difficulty; in fact he would be a problem; but he cannot. The breaker contrives to keep either in front or at the side, and the strain does not relax.

Maybe two or three days elapse before the animal is being led out in an open paddock. The tuition is not continuous as the breaker is probably "handling" four or five youngsters during the same week.

In due course the halter gives place to the bridle and when the animal is sufficiently tractable—his tractability being due to weariness rather than good intention—a broad belt is buckled girthwise about his middle. This makes him very excited for a little while but he is growing accustomed to novel sensations.

He is now "mouthed" or taught to answer to the rein.

At a later stage, again in the small round yard, the saddle is put into position and,—after a wonderful display of patience by the breaker,—is girthed up. Most Queensland horses immediately commence bucking.

Now there is a vast difference between bucking, rearing, and "pigrooting."

In rearing, the horse stands on his hind legs, and paws the air.

Corrective action: clout the animal between the ears with the open hand. This causes him to throw his head forward and should prevent him from toppling over backwards and squashing you as he would wish,—but be careful.

In "pigrooting," the horse kicks up his hind heels with great vigour and in an apparent effort to stand on his forefeet.

Corrective action: clout the animal at the end furthest away from the head, and at the same time drag the reins upwards, to *try* to prevent your colt from getting his head between his legs.

Neither of these exercises is at all disconcerting to the accustomed rider.

Bucking is more ambitious. The horse leaves *terra firma* indefinitely, all four feet being off the

ground together. At the same time he jams his head between his forelegs and arches his back ferret-wise.

Corrective action : hope for the best.

It is very pretty to watch,—from the rail of a stockyard. The first time I was *on* a buck-jumper I experienced an impious wish that I had died quite young—when I had had the measles for instance.

Some fellows go so far as to wish they had never been born.

In my case I was not long in suspense. To be quite frank I was never more relieved to part company with anything than with my saddle, even though the parting involved being hurtled through space as though from a catapult, and—owing to the inevitable influence of gravity upon solid bodies—coming to earth with a dull, decisive thud.

Practically every Australian station horse bucks when the saddle is first put on his back. Some horse-breakers put an old saddle on, and, before attempting to mount, allow the youngster to do his worst to rid himself of that encumbrance. Others—and the best of them—despise such practices and get into the saddle *themselves* as soon as possible.

The method of mounting is worthy of careful description. The rider takes a very tight grip of the near rein, leaving the other rather slack. This keeps the horse's head in close control and prevents the animal swerving round and kicking with effect. The rider at the same time takes a firm grip of the mane just behind the forelock. Sometimes he seizes the near ear. If the horse endeavours to put his head down, which he must do to buck, an upward strain on the mane and rein disconcerts him. The man faces the opposite way to the horse—so that he can see what is happening about the hoofs.

The near stirrup iron is then gripped with the right hand, reversed, and held in position for the left foot. Immediately that foot takes its grip, the right hand seizes the pommel—*not the back, nor reverse side*—of the saddle. The left knee is pressed outwards and well down against the lower portion of the horse's shoulder. The animal can then plunge

about without disconcerting the rider, who is supported by his left hand—gripping the mane—and his right hand,—the pummel. The left foot has a hold on the stirrup iron; the right is on the ground, and the (intending) rider can hop round retaining his balance when the horse plunges about. The knee against the animal's shoulder gives a sort of leverage, and in an instant the man can swing into the saddle.

If my description has been clear, it will have been obvious that the rider in mounting, keeps his body—and centre of gravity—low, in a crouching position. As he slides into the saddle his chest almost grazes the top of the horse's shoulders.

When the breaker is in the saddle you may expect to see a display of rough riding and thereafter it is merely a matter of time until the youngster is broken in. His period of initial training may extend up to three weeks by which time he has learnt readily to answer to the rein and to realise that he must submit to the will of the rider.

He is then turned out to grass for a spell; as, during the breaking-in process, he has usually lost condition. After his rest the colt is again brought into the yards and the breaker reminds the animal of all he was taught. He is then allotted to a stockman and his life of usefulness commences in earnest.

If it happen that the horse is to be used in a vehicle, as soon as he has grown accustomed to being handled and to respond to the reins, he is harnessed—with especially strong gear—and takes his place between the shafts of what is known as a brake. This is a two wheeled vehicle, very stoutly built, with particularly long, strong shafts—so long that if the animal kicks he is unable to hit the body of the vehicle. The wheels are set far apart so that it is difficult to capsize. The horse is patiently taught what is expected of him and in the end it is safe to harness him to an ordinary buggy.

Draught horses are given a little preliminary handling which involves dragging about a heavy log and they are then placed in teams with quiet animals where they soon learn to pull their proper proportion

of a load.

Australia is justly noted for the stamina of all classes of its horses. Every breeder takes care to develop the best strains. Horses bred in the Commonwealth are in great demand in India, though the reduction in military establishments in that country of recent years has caused the trade in remounts almost to vanish.

Chapter XII. Irrigation and Prosperity.

Irrigation is the salvation of great areas of the Commonwealth, areas where the land is exceedingly rich but whereon the rainfall is unreliable.

In 1920 I was motoring with some friends through New South Wales, and we visited the Yanco irrigation settlement. It was a dry season, and much of the country through which we drove from the town of Wagga was parched and dreary. But the car eventually topped a rise and one looked down on a wide valley clothed in the most exquisite verdure. By contrast with the surrounding country, that irrigation settlement was a veritable oasis. One's eyes, tired from the heat haze that had hung over the dusty plains through which we had passed, literally feasted on the delightful panorama that stretched before us as far as eye could see.

For a moment it reminded me of a scene in Devonshire, which I shall ever remember, a panorama from a hill between Sidmouth and Exeter. But Devon had been undulating, there had been hedges that fringed the little fields which were of all shapes and sizes. The snug cottages were scattered and quaintly antiquated under their thatched roofs.

Yanco was different.

The settlement seemed to be perfectly level. Water channels at regular intervals, glistening under the sun rays out of a cloudless sky, gave the impression of a gigantic chess-board.

The fields were rectangular. All the farms had orchards of apparently the same size, their vineyards and pasture lands appeared to be standardised. The very houses and their gardens seemed at first glance to

have come out of a mould. Rectangularity and uniformity dominated all things. The rows of deciduous and citrus fruit trees, or grape and other vines, were faultlessly parallel.

But it was only a first impression, and closer inspection showed that individuality in the lay out of each property had full play. The apparent sameness was due to the fact that each farmer followed a general plan, and that the best, in utilizing his precious land.

The houses—no two were precisely alike—were comfortable bungalows with wide verandahs fringed about with ornamental trees and gardens. Not one of them would not have been an acquisition to any suburb. There was a complete absence of dust—and as the water was so perfectly controlled—of mud. I had never before, nor have I since, seen so general an atmosphere of comfort and prosperity as obtained throughout that settlement.

The water for Yanco is conveyed in a channel nearly 100 miles long from a dam on the upper waters of the Murrumbidgee river, where an immense dam is constructed. All the land devoted to irrigation must be graded so as to be quite level. The channels which traversed the settlement were raised above the level of the fields. Water for any farm poured through a meter, and the farmer was charged accordingly. Every field in turn had its channels so that the water had access as required to every foot of soil on the immense settlement. The keenest friendly rivalry obtained between the settlers, each striving to outdo the other in making the best of his property. What struck me most forcibly about the settlement was the pleasure which must have accrued to the settlers in their work. It is difficult to conceive more congenial conditions. The climate was dry and bracing; the soil was given just the amount of moisture that was required by the various crops. There was no uncertainty—no disorder—but an atmosphere that compelled a man to put forward the best that was in him.

Yanco is only one of many such settlements, the oldest and therefore the most prosperous of which is at Mildura on the lower waters of the Murray.



A view at Mirdun (Victoria)—the oldest established Irrigation Settlement



Nine four-furrow disc ploughs at work—wheat growing on a large scale.

The basin of this river with its tributaries, the Darling, the Lachlan and the Murrumbidgee, embraces an area of nearly half a million square miles—twice that of France. Enormous dams are now in course of construction in this basin and sufficient water will soon be conserved to irrigate two million acres—at the same time rendering these rivers navigable for over one thousand miles.

My boyhood home was within a pistol shot of the Murray. On either side of the permanent channel, stretched flats, miles wide in places. When the snows melted with the advent of summer on the Australian Alps, whence the Murray flows, the flood waters come pouring down overflowing the banks and inundating the low lying country far and wide. As a youngster I was fascinated by those floods. They came down with amazing suddenness, and we had exciting times, rescuing stock from the low country. The river used to rise as much as twenty-eight feet above normal and it took weeks for the water finally to dissipate itself into the Southern Ocean—nine hundred miles distant, by river.

And it all went to waste!

But before many decades have elapsed every gallon of flood water will be conserved. Only two hundred thousand acres in the vicinity of the Murray has yet been irrigated. Works are now well advanced which will increase the area to two million acres. But he would be venturesome who would predict the amount of country which will be brought under irrigation when *all* the water is conserved, not only in the Murray basin, but elsewhere in the various States, all of which are embarking on extensive irrigation systems.

It has been estimated that there is water supply and irrigable land available to irrigate an area three times the size of the United Kingdom. The most productive farming land in England would not—with the same amount of cultivation—yield fifty per cent. of what can be taken off irrigated land under Australian sunshine.

*Chapter XIII.**Brains, Energy and Wheat.*

Agriculture is the soundest economic basis for national life; in fact, no other basis is possible. Fundamentally, the agriculturalist can exist without the industrialist, but the converse is not the case. The individual country which is able to control both is economically independent. But a great Commonwealth of Nations, if entirely self-contained in an economic sense, can be so strategically powerful as to be aloof from *even the threat of war*.

The object of the promoters of the Exhibition at Wembley was to endeavour to demonstrate the immeasurable degree to which the British Empire can be both economically and strategically greater than any other conceivable group of allied nations.

Every type of cereal flourishes in Australia. Although less than twelve million acres are as yet devoted to wheat, what the potential wheat-producing capacity of the Commonwealth may be no man can say; but certain it is that over 100 million acres could now be sown with a certainty that it would yield handsomely. Each year, in the light of experience and experimentation, the potential wheat zone is found to be wider than was known previously. The sizes of farms on which this grain is produced range from a few hundred to several thousand acres.

It is essential that the new settler, who wishes profitably to grow wheat, must either have experience or be able to profit by advice. Furthermore, as in any other rural enterprise, he must not be afraid of hard work. Apart from the agricultural colleges, which I shall describe later, experience can be gained only by working for a practical farmer.

THE ART OF WORK. The first essential is to learn *how* to work—to accustom one's mind and muscles to manual labour. Mental attitude is no less important than physical fitness. Unless one is in the right frame of mind the mere turning out of bed before daybreak in winter with the *prospect* of a day's hard work is drudgery—that is before the day's labour has commenced—and martyrdom before it has far advanced. But if the worker take a genuine interest in his labours,

the sense of drudgery gives place to an enthusiasm which makes all work a pleasure.

One must learn to harness and drive horses, and, in addition, "get to know" the animals, whose temperaments and capacities for work vary as do men's. Similarly, it is not sufficient to master the art of ploughing, harrowing and drilling, and the driving of a reaper and binder, or a combination harvester. One needs to understand the mechanism of these various devices. The amount of work that can be achieved by a man, or a pair of horses, or the various types of implements, in a given time must be ascertained from experience.

THE PIONEER UP-TO-DATE. The first thing to be done by the man who takes up virgin land is to fence it. It is difficult to set down definitely the cost and labour involved. The posts can always be secured from the growing timber but selected trees must be felled, sawn, and split into posts—in turn to be carted to and distributed along the line of fencing. The labour required in sinking the post holes depends upon the nature of the ground. If sandy, it is plain sailing; if a heavy clay, it is harder work.

I write from personal experience!

The wire is purchased in coils—by the ton. A fence usually has six wires so that as many holes must be bored in each post. If the district is rabbit infested—and most wheat growing localities in the eastern States are—wire netting, which is a costly item, is used. This is sunk about six inches in the ground to discourage the rabbits from burrowing underneath. At least three feet is left above ground. The cost of fencing nowadays, if done by hired labour, ranges from £40 to £100 a mile.

The next work is clearing. Green trees, excepting when the timber is to be used for posts or in buildings, are never cut down or grubbed out in that condition. If live trees are removed wholesale, the soil is "sour" for many years. Hence all standing timber is ring-barked, that is to say a deep notch is cut with an axe around each trunk, about three feet from the ground. Denied the sap which was carried up in the bark, the

tree dies, and in about a year is a gaunt spectre. On most properties taken up for wheat growing much of the timber has already been killed by the grazier who was the previous land holder. The careful farmer cuts down the best of the trees and hauls them to a clear spot for future use as required. The ring-barked area is then burnt off, but what remains after the fire must be cleared by labour. All stumps have to be grubbed out to permit of ploughing; though what is known as a "stump-jump" plough is not impeded by an occasional root which may have been overlooked at clearing time. Nowadays explosives are used to a considerable extent, especially by men who learnt their value at the war.

Much of this initial work is done by settlers who club together—either by private arrangement or under government auspices. Traction engines and mechanical tree-grubbing appliances are then used, and the cost of the work is reduced considerably. Astonishingly big trees are pulled down and uprooted with the help of cables, explosives, and a traction engine. The members of the group may arrange for the temporary installation of a saw-mill to provide materials for permanent dwellings.

It is difficult to estimate in general terms the cost of clearing, which depends on the amount of timber and undergrowth that needs to be removed and upon the methods employed. The cost may not be more than 15/- an acre, and it may be over £10. The average in country suitable for wheat culture would be from £1 to £4 per acre. It generally, but not invariably, happens that the more difficult the clearing the better the land. On some of the finest wheat-growing land in Australia, as in the Mallee district of Victoria, the natural timber is a low dense scrub. The means adopted to clear this is to smash it down with immense rollers, either driven by steam or drawn by long teams of bullocks.

CULTIVATION, ETC. After clearing, the ground must be ploughed and the other cultivation proceeded with. The acreage that a man can deal with daily depends on the size of his plough, and on the

horses at his disposal. The number of furrows on ploughs range from two to ten. Each furrow, which is about eight inches in width, will turn over up to one acre a day on workable soil. The sizes of horse teams vary correspondingly from three or four to a dozen. The driver rides on the implement. From his seat he has to direct his team, ensuring that each horse does its share, and also to control the plough's mechanism by various levers; but the mechanism is so constructed that control is simplified. On large wheat farms it is not unusual for the plough to work continuously—night and day—with changes of horses and drivers. Tractors also are used. Artificial lights of the motor lamp variety, carried on high brackets over the vehicle, are used to facilitate continuous working. It is to be borne in mind that darkness comes down with but little twilight in the Antipodes—at five-thirty in winter and about eight o'clock in summer time—in most parts of Australia.

The sowing is done by horse-drawn drills which, in addition to resulting in economy in the use of seed, ensure that it is evenly distributed. The artificial fertilizer is run through the drill with the wheat; super-phosphates is generally used. About a bushel of seed, mixed with perhaps a hundredweight of fertiliser, is sown to the acre. The most efficient farmer sows his wheat with a combined cultivator and seed drill—thereby saving one operation and getting his seed planted at the right time. With this implement (an Australian invention) the work is done more effectively than by cultivating and *afterwards* sowing with the ordinary type of drill.

After planting and (if necessary) rolling and harrowing, there is nothing more to be done to that field until harvest, from four to six months later. The grain is then gathered by what is known as a combination harvester. This also is an Australian invention. Only the ears are cut off the standing wheat, by a contrivance having a sweep of from six to twelve feet. The grain, with its mixture of husks, is conveyed to the winnowing and "cleaning" drums, which form part of the vehicle. The harvester is drawn by a team of

horses, and the revolving wheels actuate the winnowing fans. The husks are broadcast and the grain, which is then ready for market, falls into a tank—on the vehicle—whence at intervals it is either taken into the bags or handled in bulk. As in the case of ploughing, harvesting is often continuous, with the aid of artificial lighting. A small quantity of the crop is cut, by a combined reaper and binder, for hay,—to be made into chaff for horses and other live stock.

With proper appliances and plenty of horses, one man can plough, cultivate, sow and harvest 300 acres single-handed in a year! This is thanks to the methods employed plus a wonderful climate. It is safe to say that nothing of the kind has been done, nor is likely to be done, in any other part of the world. The great boon of having all his implements made to carry him while he toils is that the farmer can work very long hours without undue fatigue.

The farmer has much to occupy his time after sowing, and while waiting for harvest. He may have more land to clear; if he be a good husbandman he is sure to have much to fallow.

LAMB FATTENING. Generally speaking the farmer's activities extend beyond cereal growing. Nearly every wheat-grower keeps sheep. After the grain has been harvested the long straw stubble is left standing, and among it is much sweet grass on which sheep thrive. The first shower promotes new growth, which is ideal fattening fodder for lambs; and from this source the agriculturalist is able considerably to augment his income.

GENERAL. Dairy farming may be a sideline. The good husbandman is always busy. He usually lives in a nondescript dwelling until he is established. A hut can easily be built of rough timber with galvanized iron or large sheets of bark for a roof. But after a few years the primitive dwelling gives place to a smart bungalow with proper conveniences. The enterprising man soon has his telephone and acquires a motor car.

Many growers commence on a share-farming basis. The landlord—probably a squatter—supplies the

ground, seed and fertilizers; the farmer provides horses, implements and labour, and the profits are shared in equal proportions. Some of the most prosperous men in the Commonwealth laid the foundation of their fortunes by share-farming, which is applied to many rural industries.

The agriculturalist's greatest enemy is drought, but, as has been explained elsewhere, it occurs only infrequently, and the soil, profiting by the rest which is forced upon it in the absence of rain, is more than ever fertile when the drought breaks.

As to the profits which accrue to the wheat growers—once again much depends on the amount of labour expended and the fortune of the season. The better the farmer works his property the more satisfactory his return. One grower may take twenty-four bushels to the acre off his crop, and his neighbour only a dozen bushels—though there be but a wire fence between them. The former was more careful with his pre-sowing cultivation, and, when rain fell after drilling, he quickly harrowed the ground to loosen the surface, and thereby retained the moisture. His neighbour did not trouble with these details and said bitterly that "his luck was out!"

The price per bushel has ranged from 4/- to 5/9d. during the past eight years with the exception that in one season 9/- was secured. It is this fluctuation in prices which is so disconcerting to the farmer who clamours for some sort of stabilization. At the present time he has no idea what he will get for his next season's wheat. It is bad enough to have to contend against uncertain rainfall, without the additional embarrassment of fluctuating prices. As much as 150 million bushels has been marketed in a year, and under one third of that amount was consumed in Australia; the balance had to be sent overseas—to the fluctuating markets. It would not be so bad if the home consumer received any benefit. Pages 13 to 17 of the Important Foreword show the amazing state of affairs which has existed in regard to wheat during the last five years. The Australian wheat grower is prosperous, but he has his own ingenuity, which results in cheap production,

to thank for that. The point to be stressed is that, with proper Imperial organisation, not only the dominion and Home farmers—and more of them—would be a great deal better off, but the *consumers* at Home would be richer by millions of sterling per annum.

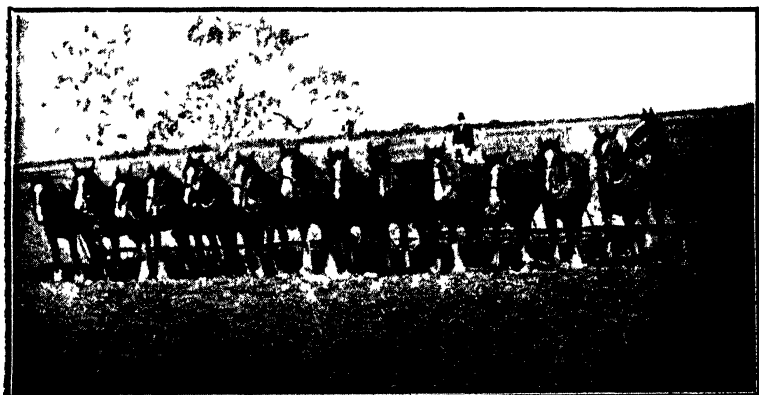
Wonderful work has been done by Australians in the breeding of new varieties of wheat, of which there are now several hundreds. As each new district is brought under the plough the peculiarities of the soil are examined, bearing in mind the annual rainfall and the months in which the rain usually occurs. An experimental farm is established and a selection of wheats is tried in small plots having exactly the same type of soil and the same sort and amount of fertilizer. Maybe twenty varieties are planted on one allotment. Another series are tried with a different fertilizer or with a greater or less quantity of it. The results are carefully noted, and the farmers in the district are advised what sort of seed to plant and fertilizer to use. One type of wheat will flourish in one district and fail in another, so the value of experimentation cannot be over-estimated.

The makers of agricultural implements as we have seen, constantly and successfully strive for the saving of man power. These manufacturers sell their implements on very long terms. Frequently no payment is expected until after the initial harvest, and if by chance the first should be a bad season the manufacturer always gives a good farmer extended credit.

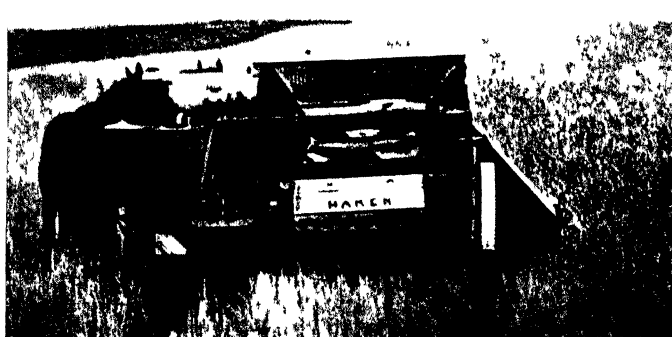
The conditions under which wheat-growing land can be acquired are either by direct purchase or by selection under a governmental scheme. The actual value of such land is from £3 to £10 per acre; although I am informed on reliable authority that excellent virgin land, close to railways, may be had in Western Australia at from £1 to £2 an acre. The private vendor is always prepared to give long and favorable purchase conditions. As far as government lands are concerned, each State has its own methods and terms of sale and finance, but as it is the prime wish of all governments that agriculture and other rural enterprises should be encouraged and extended, the selector can



A "first ploughing" after Mallee Scrub has been rolled down and burnt off



One man driving fourteen horses harrows 100 acres a day!



The combined harvester strips, thrashes and winnows the wheat in one operation.



Small Red Kangaroos very easily tamed



One of the many varieties of opossum

rely on being given exceedingly reasonable terms. State and private banking concerns compete in an eagerness to finance the farmer. Thus it is that as soon as a crop is sown a wheat grower is able—if necessary—to get a cash advance against the anticipated value of his crop.

A man who contemplates embarking on this form of farming can feel more than reasonably assured that the venture will prove profitable, notwithstanding the economic *débacle* revealed in the Foreword.

The Australian however is at some initial disadvantage compared with a North American grower on account of the greater distance of the Commonwealth from England, and the additional amount of ocean freight. But although the shipping costs are heavier than from America, the actual rail charges from the farm to sea-board are much less, in the aggregate, as produce does not require to be hauled over such long distances as in the United States—or Canada.

Of recent years, wheat culture in many countries, particularly in North America, has proved unprofitable. During the war and for two years afterwards, wheat values were high, but when the market receded to almost pre-war level, growers were unable profitably to produce this grain because land values, taxation and labour costs did not fall to a corresponding degree.

I am most creditably advised that *tens of thousands* of wheat farmers in North America are finding great difficulty in meeting their obligations, and the situation has become so acute that politicians and business men are endeavouring to find some solution which will encourage agriculturalists to continue the production of this cereal.

On the other hand, the Australian producer is admittedly prospering, and one may summarise the reasons which enable him to produce profitably when the farmers in many other countries are not in a position to do so: Land values, generally, are lower in the Commonwealth than elsewhere, and the grower there is able to own or rent a larger area of land and to cultivate more economically and extensively than are

farmers in any other country; climatic conditions permit of Australians working in their fields almost every day throughout the year; horses are comparatively cheap and can be maintained at a very low cost, and they do not need to be stabled at any season of the year; farmers are able to secure labour-saving implements of a unique class and on terms which place them within the reach of all; the expense of harvesting is about one-fifth of the cost of similar work in most other countries.

The net result is that year in and year out the Australian is able to produce wheat at from 25 to 30 per cent. more cheaply than his less fortunate or less skilful competitor in other countries.

Oats are grown extensively for fodder in certain localities. Barley—both the malt and pearl varieties—rye, beans and peas flourish in the southern portion of the Commonwealth. Rice has recently been grown profitably on the irrigation settlements. Maize (or Indian corn) to which further reference is made in later chapters, is grown extensively for grain in New South Wales and Queensland, though it flourishes in all States as a fodder plant.

Chapter XIV. Animals—Quaint and Interesting.

On the evening prior to writing this chapter I attended a cinema in the Strand. The film was entitled, "Trailing Wild Animals in Africa." In amazing proximity to the camera one saw wild elephants, lions, baboons, and giraffes in dozens, and zebras and buffaloes in countless herds. The film spoke volumes for the enterprise, endurance, and the outstanding bravery of the photographers—among whom was a little lady of great pluck, possessing wonderful nerve and prowess with a rifle.

That picture demoralized me. I had wished to write a chapter on Australia's fauna, but the subjects for description seemed but poor stuff as compared with what the Continent of Africa has to offer to the scribe.

But we live in a practical age, and I have tried to take consolation from the indisputable fact that the presence of wild elephants and giraffes does not

necessarily harmonise with a happy home; and a happy home is what most of us strive for.

If you want to see giraffes, lions and baboons in the Commonwealth you must go to the zoos. If you wish to engage them in combat you must climb into the cages.

Australia cannot boast any wild animals—that is to say, none which are at all dangerous to man, woman or child. It is an awful admission to have to make. If ferocity be a criterion, the fauna of the Antipodes is prosaic. But that is not to aver that it is entirely uninteresting.

It appears that our animals belong to a remote period, and, by the usual rules of the world, they should now be all in the fossil stage. Nature, it would seem, has been tricked. The Island Continent, with its animals which lay eggs, and its fish that climb trees, has undoubtedly been overlooked in the march of zoological progress.

After some thought I have come to the conclusion that, although one is admittedly denied the pleasure of being torn to pieces by an enraged lion, skewered on the horns of a wildebeeste or trampled to death by an impetuous though well intentioned bull elephant, there are some compensations in surveying the rather unique animal life of the Antipodes.

The kangaroo is the anachronism first to engage our attention. Like many of his furry and scaley fellows, in his present form, he should have been extinct at least fifteen million years ago. He has not even learned to walk on all-fours, and the female pampers her baby by carrying it about in a pouch for months after its arrival.

It is only necessary to imagine what a marsupial cow would be like leaping around on its hind legs in order properly to appreciate Nature's having kept abreast of the times in other continents.

But I was discussing the kangaroo. This interesting marsupial is—or was—found in all parts of the mainland and in Tasmania. With the progress of settlement he disappears—in other words he is killed—and thus it is that he now flourishes only in localities

populated very sparsely, if at all.

There are many different varieties even of the kangaroo, properly so called. There are those which frequent dense scrubs and others that prefer the open country. The former are of a dark grey colour and in outline they are exceedingly graceful. The fur of the kangaroo of the plains is of various hues. In the males brick red predominates—the females are a silver grey. In both cases the belly fur is nearly white. All-white kangaroos have been found on rare occasions. The red 'roo is rather ungainly—especially about the head and paws—but only by comparison with the dark grey fellow who lives in the scrubs. Both types grow to a great size. I have seen red and dark grey bucks—old men as they are termed—which, when standing erect, were about seven feet in height.

When the 'roo is feeding, or moving slowly, his paws—which are hand-like and armed with, by no means vicious, claws—rest on the ground and the animal progresses after the manner of a rabbit; that is to say, paws and hind legs move in pairs. It would be quite impossible for a kangaroo to walk Felixwise.

When startled the animal stands perfectly erect on tip toes and tip tail. They were perhaps the first tripods to be devised. But they do not dawdle in that position. They glance round fearfully and in an instant are making excellent progress towards the horizon, taking enormous leaps. I cannot recollect the longest measured hop, but a large 'roo would average from fifteen to thirty feet when in a hurry. Unless the animal is moving leisurely the tail touches the ground only occasionally. It sticks out more or less rigidly and acts as ballast and—to a certain extent—is a rudder and joystick. But a bob-tailed kangaroo would be in a much worse predicament than a rudderless ship.

If progressing on all-fours, while the hind legs are moving forward, the tail carries most of the weight of the body. The youngsters—yclept joeys—are carried until about two or three months old. They happen along one at a time. When Joey first occurs in the pouch his size is perfectly ridiculous. In avoird-

dupois he weighs about an ounce, and in dimensions a mouse is quite massive by comparison. The tiny fellow is attached to the teat which passes down his throat to somewhere in his middle and there sticks fast. In shape there is nothing to identify him as a kangaroo—he is simply an embryo, with no visible eyes and the merest suspicion of a tail and legs.

But he grows.

He is shamefully bald until he is about a foot long by which time he has assumed his proper shape. Then the softest down gradually develops into a furry coat.

By this time Joey is taking an interest in mundane affairs. A pert little head plays jack-in-the-box with ever-growing vigour and curiosity. The doe now seeks quite the most inviting grasses, and, as she bends to browse, Joey samples his first vegetable diet—and finds it excellent. Later on his mother hauls him out, and sets him on his legs. He is very groggy, but a maternal paw steadies him, and after a few lessons he becomes quite adept at hopping in the approved style. But, until he has developed a nice turn of speed, on the approach of any danger he is bundled back into the pouch and carried to safety.

Very occasionally there may be twins but as the doe has only two teats triplets are out of the question. Throughout Victoria and in parts of New South Wales the few surviving kangaroos are rigidly protected by law. On the contrary, outback in the larger States a few years ago a bonus for 'roo scalps was paid to shooters. Of late the high price of skins has for the most part obviated the necessity for any bonus. Shooting is quite an industry in the remote bush, and the rise in price of hides has made things bad for the 'roo.

Thirty years ago these marsupials flourished in countless thousands in favoured remote districts. They outnumbered the sheep and devoured great quantities of grass. It was essential, if domestic stock were to survive, that the 'roos should be thinned out. So drives were organised. Squatters co-operated and the employees from three or four stations gathered at one homestead, bringing their own horses.

A large and very high yard was erected in a

selected locality, and beside a fence from which a long brushwood brake was constructed so as to constitute a trap in the shape of a V, at the apex of which was the yard.

The stockmen—perhaps fifty strong—then sallied forth circling the paddock as for a stock muster. The kangaroos were driven forward quietly towards the fence. There was no hurry at first and the animals were so far ahead as seldom to be seen. Riders were posted at intervals for some miles from the yard in a line parallel to the fence, but hidden in the bush.

At a given signal the hunt commenced and there was no more leisure. The terrified marsupials made off at amazing speed, but were not given time to attempt to jump or crawl through the fence; and in any event the best getaway seemed straight ahead. As the horses tired, so the relays took up the running and the 'roos were kept moving at breakneck pace until the treacherous V was reached.

In the wildest panic they bounded through the aperture at the apex only to find themselves trapped. A gate closed behind them. The only outlet led to a very much smaller yard, into which they were driven until positively packed—perhaps three or four thousand of them.

Then the slaughter commenced and the carcasses were left to rot, the skins in those days being regarded as comparatively worthless.

Fifteen years ago I saw the sites of some of these old yards, upon which there were literally feet deep of rotten bones. It seems to have been cruel, but it had the virtue of being necessary, which is more than can be said of, for instance, pigeon shooting.

When I was at Corinda Station in Queensland the dozen or more shooters who hunted over the property each averaged some 1,000 skins per annum. The hides were sold by weight, and netted about half-a-crown each. Nowadays they are worth perhaps double that figure. The fur is not very valuable but the hide makes excellent boot-leather.

The kangaroo's only means of defence is a forward and downward rip with his powerful strong-nailed toes.

If hard pressed by dogs, the animal rushes into a water hole and the unwary dog comes to a bad end. He has only to approach close enough for the 'roo to seize him with his fore paws. The dog is then held under water until drowned. If no water be in the vicinity the kangaroo, if run down, fights gamely. If a dog allow himself to be grabbed and hugged, the great toe is brought into play and the result is that the unhappy canine's entrails are broadcast. It may be added that if a man were foolish enough to get to grips with a large kangaroo he would have an unpleasant time.

Wallaroos differ from kangaroos in colour and shape, and in the texture of the fur. They abound only in hilly or heavily timbered country. Their colours vary, but the majority are either almost black or a light blue. They have very pretty heads and shoulders but the rest of their bodies are more stockily built than, though they are almost as heavy as, kangaroos. Their fur is longer and approximates more to hair than in the case of the kangaroo proper.

Wallabies are of various colours. There are many kinds, some of which are not more than two feet in height, and none exceed four feet. Apart from minor points of difference in anatomical structure they are diminutive kangaroos.

There are bandicoots,—which are smaller still than wallabies,—and numerous hopping, as well as ordinary, rats. All—with the exception of one species of bush rat—are marsupials. So are the bush mice.

There is a climbing kangaroo, which is very rare. He lives in the tree-tops and bounds from limb to limb. Apart from the fact that his tail and general build are more slender, and, of course, that his feet are adapted to gripping branches, he is not unlike a wallaby. Other furry denizens of the trees—all marsupials—are opossums of numerous varieties, and flying squirrels. The latter are the prettiest animals that I have seen. They do not actually fly, but glide. From their elbows to their knees stretch flaps of soft furred skin, and they have long, bushy tails. Springing from the topmost branches of one tree the squirrels glide to the lower limbs of another. Unfortunately

their skins, and those of the opossums, are so valuable that they are very scarce, despite protective laws.

The koala, or native bear, is the quaintest little fellow of the animal kingdom. He is every inch a bear though only about as heavy as a fox terrier. He is tail-less and is nearly all fur—exquisite fur. He has the most fascinating wee face, confiding brown eyes, and snub nose and large velvety ears. He is the embodiment of all that a live teddy bear should be—easily tamed, docile, very affectionate and absolutely harmless. He is the penguin of the animal kingdom. There is some hope for the opossum and flying squirrel, because they are nocturnal animals, but the koala goes abroad by day and is ridiculously easy to shoot. As his skin is worth more than its weight in silver coin he seems to be doomed. Every legal effort is made to protect him, and dozens of men have been sent to gaol for having koala skins—however acquired—in their possession. But this quaint and most delightful little creature becomes scarcer from year to year.

Wombats—another queer anachronism according to zoologists, though I do not quite know why,—are rather like brown, very hairy pigs, with the shortest of legs, and powerful claws instead of hoofs. They live in burrows in hilly, rocky regions, and are seldom abroad by day. They are exceedingly shy and are rarely seen. With the advance of settlement they vanish. Their diet is vegetarian and consists largely of roots and yams which they tear out of the ground with their strong claws. Their hide is thick and not of much commercial use. I have been told that the flesh of young wombats is excellent fare and I see no reason why it should not be. But as far as his “personality” is concerned the wombat is the direct antithesis to the koala.

The duck-billed platypus, or ornithorhynchus, is the strangest of all animals. He is about half the weight of a hare and in shape approximates to the beaver; like that animal he is an amphibian. Instead of a sensible mouth he possesses a broad bill like a duck's—though much more powerful. His legs are very short and are finished off in webbed claws. In



This sort of picture can be secured only in the Far North. The photograph was taken by Tom ("Rusty") Richards of International Rugger fame.



The Kookaburra—or Laughing Jackass—whose cousin in the London Zoo has brought mirth into the homes of countless "listeners—in."



An artistic study in the Far North—Aborigines and a Turtle's nest.

rear of each hind foot he possesses a spur which is his only weapon; but it is a nasty weapon, and poison follows a scratch made by it.

The platypus lives in burrows in the banks of rivers or creeks. These have openings below, as well as above, the surface. The animal can remain submerged for an indefinite period.

To make confusion worse confounded this extraordinary creature builds a nest in its burrow and the female lays eggs—and suckles her young. For the benefit of those of an enquiring turn of mind it may be added that the platypus cannot climb trees; it does not purr, nor—so far as is known—does it quack or cackle.

Its diet consists of shell fish, frogs and similar aquatic fare, as well as worms and grubs. The skin is very beautiful, but happily the animal is not often seen and rarely caught. It is *not* a marsupial.

The ornithorhynchus has a second cousin in the Australian hedgehog—or echidna. This creature also lays eggs and suckles its young. It thrives on ants. The echidna is a favourite item of diet with the aborigines, who pack mud round the spines and cook the flesh in the ashes.

Of water rats there are at least two varieties—one very large with a valuable skin and the other smaller and “rattier.” They abide in burrows and hollow logs and live on shell fish; young water birds, turtles and aquatic carrion. They are savage little brutes but are not to be blamed for that, because nobody loves them. If one is caught by a leg in a spring trap—which is a vilely cruel invention—he shows his spirit by chewing off the captive member, and carrying on with three legs—and more caution—in future.

Australia boasts only one carnivore of note and that is the dingo. This animal is just dog. He is said to be the one and only original true tyke, and as his skeleton is found in *strata* millions of years old he is a genuine Australian. Before the advent of the white man the dingo had a pleasant enough time. Wallabies, young kangaroos, opossums, and a variety of ground birds provided his inner dog with all that

was to be desired. But with the advent of sheep, life—at first—took on a much rosier hue. The stupid things were easy to kill. It was great fun killing them and a single dingo might account for a dozen or more in a night.

So it is war between the squatter and the dingo. But the dogs are cunning, and many and devious are the means adopted to outwit them. Great precaution is taken in laying poison or setting traps. The meat used as bait must not have been touched by hand. The poison—strychnine—needs to be inserted in a certain way. The bait is singed over a fire to remove all trace of scent of human beings. It is then buried near water so that if the dog does take the bait he will naturally go for a drink after his feed. This makes the poison act quickly and the dingo dies nearby where the trapper can find him. Trails of aniseed—dear to the hearts of all dogs—are laid towards the bait. The scent of burnt meat attracts attention and the dingo thinks he has found another dog's plant—at least that is what he is supposed to think.

A bonus is paid for all scalps *apropos* which I shall tell you about the wily Ah Kim.

Ah Kim's compatriots for the most part devoted their energies to an affectionate tillage of the soil to provide vegetables for sheep station homesteads; that is if they lived in the bush at all. Generally they preferred the cities or country townships, where they toiled over washing tubs and wielded smoothing irons with a cunning that captured the laundry trade and held it against all comers. A Chinaman on horse-back was a rare jest in Queensland; but Ah Kim was a rare chinaman.

There were still quite a number of Celestials in the Commonwealth who had been admitted before the White Australia policy became law; and of these Ah Kim was perhaps unique. He was a humorist of no small order. To hear him render, "Kat'leen Mavou'neen" or "Come Back to Elin" was indeed an experience. He used to avow that to sing these songs made his "poo' ole Ilish heart bleed!"

Ah Kim was the delight of the mustering camps,

but he was too shrewd a gentleman to be a stockman himself. Stockmen work for weekly wages. Ah Kim preferred contract in respect of which he was paid by results; and he was a consistently hard worker.

Kangaroos were very plentiful in our district and shooters were growing prosperous out of the sale of the hides. A man who knew the business, that is to say who thoroughly understood the habits of the marsupials and was a good shot, was able to make a satisfactory income. And there were perquisites. A bonus of £2 was paid by the squatters for dingo scalps, and eagles' talons brought five shillings a pair from the same source. The station owners provided strychnine *gratis*, and the carcase of every kangaroo shot, when skinned was poisoned and left as bait. Sometimes a dingo, for all his native cunning, would fall a victim. Eagles were easier fry.

It was not unusual for a shooter to add £5 or £6 a month to his income by a systematic war on these two pests; and no squatter begrudged the bonuses. A single dingo, as we have seen, might kill many sheep in a night, hence his scalp was cheap at £2. And eagles caused many casualties at lambing time, so five shillings for a set of talons was a good investment from the station owner's point of view.

Ah Kim suddenly developed a great interest in kangaroo shooting. He would ride up to a shooter's camp and entertain him with "Ilish" songs and many a good story that sounded the better for its strange source. Then the shooter would tell the Celestial all about the art of the craft.

One day the motor coach delivered a repeating rifle and a prodigious quantity of ammunition to Ah Kim. He set himself to target practice with an assiduity that intrigued everyone; and he became a fairly good shot. When Ah Kim had completed his timber cutting contract he turned 'roo shooter. The Boss smilingly allotted him a section of the station run, over which to shoot, bade him be careful not to put any bullets into the sheep, and wished him good-luck.

Ah Kim, replete with riding and pack horses laden with rations and the necessary camping gear, set

forth into the bush and we did not see him again for about a fortnight. When he next put in an appearance his pack horse was piled high with skins. Everyone was surprised, but Ah Kim was touchingly modest. The book-keeper, who was an agent for a tannery in Brisbane, struck a bargain with him for his spoils. Ah Kim, with the blandest of smiles then produced five dingo scalps from his saddle pouch. Five, no less! A perfectly good £10 worth in addition to a profitable fortnight's shooting.

The scalps were gory with ancient blood and they had an all prevailing and assertive stench. Ah Kim proffered them gingerly to the book-keeper, but that gentleman, having a proper Anglo Saxon sense of smell, ordered Ah Kim to throw the trophies on the ground, and to make a fire and burn them on the spot.

"Ali'" smiled Ah Kim—"lil' bit o' smell no halm." But he lost no time in reducing the scalps to ashes. The book-keeper stood to windward whilst he supervised the operation satisfying himself that the scalps were destroyed.

Ah Kim received his cheque, purchased more rations from the store, and then went down to the stockmen's quarters. He sang "Anothe' Lil' Dlink Wouldn't do us any Halm" and produced a bottle of rum. The bushmen toasted his further successes. Ah Kim then ventured again into the wilderness.

Three weeks later our celestial prodigy turned up again, bland as usual, very cheerful, with another load of skins—and *seven* scalps! They were more malodorous than ever.

"Dingos welly dead when me find 'em," explained Ah Kim. "No likee job too muchee!" Once more he was ordered to make a fire and burn the scalps without delay.

"I'd no idea there were so many dingos out at Burrawong" the Boss remarked as he signed the cheque which had been filled in by the book-keeper in the Chinaman's favour, "they must be doing a devil of a lot of damage among those wethers. It's a good thing Ah Kim is out there, but I wonder how he manages to get so many;—twelve dogs in five weeks!

That must be a record since we commenced to pay the £2 bonus," the Boss continued, "he evidently has some cute chinese dodge for beating the dingo's cunning. However there can't be many more about."

But the next time Ah Kim came in with skins and for rations he brought four *more* scalps. How they did smell! Ah Kim and his horse were surrounded by a halo of blow flies. But the book-keeper was away, and it was the Boss to whom Ah Kim had to effect delivery. The Boss did not seem to mind smells.

"Hey, Jimmy, let me look at one of those scalps." The Boss addressed every Chinaman as "Jimmy." Ah Kim picked up one that looked and smelt as though it had been taken off a carcase green with age. But the Boss was smell-proof on that occasion. He took the thing and inspected it carefully. Ah Kim edged away at the first promise of close examination. Then with a scared "no savvy" he displayed a wondrous agility in scrambling on to his horse, which stood by, and in two seconds was making for the sky line by the shortest route.

A few minutes later the Boss was after him on horse-back, stockwhip in hand. Ah Kim had the advantage of knowing exactly where his camp was. The Boss was a good tracker but the ground was dry and the hoof marks were faint so he could not make the progress which was achieved by Ah Kim, especially when the latter had so much at stake.

When the Boss reached the Chinaman's camp the Celestial's rifle and everything of value was missing—so was Ah Kim. In his tent was a bottle of dye and a set of hair clippers. With the aid of these, and a lot of patience, together with a needle and cotton to sew in "ears," a dozen "scalps" might have been made out of one hide, and it didn't matter much what sort of a dog the hide was taken from. A dingo's skull smouldered on the camp fire. The final camouflage had been imparted by wetting the scalp in blood and tacking it over the skull to dry into the correct shape. In a few minutes the camp was reduced to ashes, tent and all, which was a waste—but the Boss was annoyed.

We did not see Ah Kim again. No doubt he left

for other and more congenial surroundings.

I do not know if dingoes were ever found in Tasmania, but that island is able to boast of two moderately large carnivora that have never been seen in the mainland of Australia. They are the Tasmanian devil and the Tasmanian tiger. Both are very fierce in defence, and so destructive to domestic animals that systematic war has been waged against them, and they are now very scarce.

There are two types of wild native cat in the Commonwealth, one a small ferret-like creature, and the other considerably larger, and called the tiger cat. Both varieties are nocturnal by habit, and rare in most districts. But if they be in a locality the poultry yards thereabouts suffer from their depredations.

INTRODUCED FAUNA. Rabbits, foxes, hares, and deer have been introduced to Australia. The two former have proved great pests, and all have thrived exceedingly, but are more or less restricted to the south eastern States of Victoria, New South Wales and South Australia.

Buffaloes from the East were liberated in the Northern Territory over sixty years ago. They increased and multiplied beyond expectations, and there are now countless thousands roaming over the vast areas of the north. Buffalo shooting is quite an industry, the hides being very valuable. A few years ago restrictions were placed on the numbers permitted to be killed, as at that time the herds were threatened with extinction but now they are well re-established.

Wild domestic pigs and goats flourish in many parts of the Commonwealth, and wild household cats work havoc among the native birds.

Chapter XV. Birds, Reptiles and Fishes.

The emu used to flourish in all parts of the mainland and in Tasmania, but he too disappears with the advance of closer settlement. The appearance of these birds is familiar to all. They are not so tall nor as heavily built as ostriches and they have no ornate plumage. Their feathers resemble thick, dark brown hair. The only use to which I have seen the plumage

put was to decorate the hats worn by the members of certain regiments. The Queensland boy scouts, who are in England at time of writing, wear tufts of the feathers in their sombreros.

From an economic point of view the emu is a useless fowl, but I do not imagine that he has many regrets in consequence. His flesh is a dark brown and very coarse. White men do not eat it, but it used to be relished by the aborigines. In most tribes youths were not permitted to partake of emu meat until initiated into manhood after various ceremonies.

The birds appear to have no wings, but, tucked away in the plumage, are two small flappers which are entirely useless. The eggs, which are very large and of a dark green colour, are laid on the ground out on the open plains. The number varies from seven to fourteen. Males and females take turns at hatching, and the nest is seldom left. Notwithstanding its size, it is an easy matter to pass close by an emu sitting with head crouched in the long grass. The eggs are exceedingly delicate in flavour and are eagerly sought after by stockmen. They are scrambled or made into cakes and puddings. A large pan is required to cook a single egg, the shell of which is thick and strong. These shells are used as ornaments and are made into tea cups and similar articles. The rich, dark green colouring lends itself with excellent effect to silver mounting. The surface is adapted to chip carving, and a well mounted and carved egg makes a handsome ornament. The chicks are striped zebra fashion when young. They are adepts at hiding from natural enemies but are easily caught by men. The emu's diet is grass, herbs, berries and wild fruit. He also has a *penchant* for swallowing pieces of metal.

The birds are easily tamed but are clumsy and uninteresting when they grow up.

They are very fleet of foot and can wear down most horses. Their only means of offence or defence is to deliver powerful kicks which are capable of breaking a man's leg or killing a dog. But they do not rush up and kick a man for the fun of the thing, though he who robs a nest needs to be careful. On the open

country outback it is not uncommon after the breeding season to see as many as fifty emus at a time. They offer no sport to shooters as they are so curious that merely to wave a handkerchief causes them to come to close quarters to make investigations.

There are two varieties of wild turkey, one a bustard, found on the plains, and the other—more nearly approaching the domestic bird in appearance—which lives in the dense scrubs. The turkey of the plains is a handsome fellow. He stands up to three feet in height and weighs as much as thirty pounds. He is a splendid table bird, and on that account is rapidly disappearing from settled districts. Usually only one egg—never more than two—of a smudgy green colour, is laid on the bare ground. The chick is able to fly very soon after being hatched. If one be shooting afoot, turkeys are usually secured with a rifle as they are difficult to approach within shot-gun range. If one be in a motor car or other vehicle the bird is lulled into a sense of false security and can generally be brought down by a charge of shot.

Scrub turkeys, and another type of ground bird called a Mallee hen, have a quaint method of incubating their young. Huge nests are made on the ground by gathering together grass and herbage, which are mixed with sand. The nests are really large mounds on top of which a fresh layer is built each year. A hole is then scratched in the centre and the eggs from several hens are deposited in the depression. The eggs are then covered over with layers of vegetation and earth so that with the first shower of rain spontaneous combustion will cause heat. When they are germinated the chicks scratch their way to the surface and thereafter fend for themselves. I have heard it said that the adult birds wait in the vicinity and then take charge of the brood, but I have no definite information on this point.

Mutton birds, sea dwellers which frequent the lonely islands of the Southern Ocean, are others which feel that their maternal duties are complete when the eggs are laid. Certain islands close to the south coast of Victoria and near Tasmania are visited at the laying season by countless millions of mutton birds. They



Emus invariably curious



de Rougement vindicated



Terns, like many other sea-birds, are fearless of men at nesting time

deposit astonishingly large eggs in the sandhills, and the heat of the sun effects incubation. When the chicks appear they are extraordinarily fat; they are in fact podgy repositories of oil upon which they thrive while their feathers develop and until they assume their graceful adult shapes. Tens of thousands of the young birds are killed and sold in the Australian markets annually. The flesh is so saturated with oil that after a little smoke-drying it will keep indefinitely. It is very palatable, whereas the meat of the adult bird is quite rank.

Perhaps the most remarkable of the feathered denizens of the bush is the lyre bird, which is about the size of a small domestic hen, but which possesses a remarkable tail in the shape of the old-fashioned musical instrument; when strutting—peacock-fashion—the bird carries its tail erect. It stands about two feet six inches high. Lyre birds are exceedingly shy and are to be seen only in the remote bush among the dense undergrowth which underlies the tall forest trees. They have playgrounds to which they carry any novel or especially bright articles.

Bower birds, of which there are many types varying in colour, also establish playgrounds, and are pickers up of unconsidered trifles for the ornamentation of these bowers, which, as is the case with the lyre birds, are quite distinct from their breeding nests. Bower birds are wonderful mimics and have weird ventriloquial powers. Their call when frightened serves as a warning to all wild birds and animals.

Cassowaries, which approximate to both emus and kiwis (natives of New Zealand), are occasionally seen in the north coastal bush lands.

There are numerous varieties of wild duck in great numbers, and wherever there are swamps there is ample shooting to be had. The musk duck is the strangest water bird; he has small wings but he is no more able to fly than is a penguin. He is a wonderful diver and, as his name connotes, he exudes a strong odour of musk.

Pelicans, black swans, and cormorants abound throughout the Commonwealth as do ibis—black and

white, various types of cranes—in many colours, egrets, bitterns, spoonbills and other waders. Plovers, curlews, snipe and quail are found in large numbers.

The brolga, or native companion, is a stately beauty. He is the largest of all cranes, standing about three feet six inches in height. He is found near, but seldom enters, swamps, and is therefore not a proper wader. In colour he is a delicate slate blue, the male having a scarlet head. The eggs—two or three in number—white, mottled with red, are laid on the bare ground, as are plovers'. Brolgas indulge in a type of dancing reminiscent of the lancers. They are graceful exquisites, and, being largely insectivorous, are in great favour.

There is one very rare representative of the stork family called the jabiru. He is a solitary fowl and exceedingly shy. During many years in the bush I saw but one.

The kookaburra or laughing jackass is the largest type of kingfisher known. About the weight of a rook, he is a genial fellow of stocky build, having modest brown plumage apart from the typical bluish green band across the wing. "Jack" is a great humorist. He greets sunrise with uproarious mirth, half a dozen birds joining in the fun. The noise, which can be heard for half a mile or more, is absurdly like human laughter. At various times during the day the birds have corrobories, and as the sun sets they laugh with the utmost derision for minutes at a stretch, ceasing only to recommence, until darkness descends.

The kookaburra kills and eats snakes—up to a couple of feet in length—which he pulverizes against a branch before swallowing. It may take him an hour to get a reptile down his throat but he never despairs. In due course he bursts into hilarious laughter. Frogs, mice, and large insects are supposed to cover the range of his diet, but I grieve to have to admit that young birds, and even domestic chickens, are not despised.

There are numerous lesser kingfishers.

The Australian magpie is a pert, handsome bird. He has no end of swagger, and his glistening blue-black and snow-white plumage is something to be proud of.

His carol is a series of full melodious notes unrivalled by any feathered songster in the world. Magpies are very vicious at nesting time, but the sturdy fellows are exceedingly popular.

There are three varieties of wild pigeon with which I am familiar; the wonga—a splendid, large, but all too rare, bird; the bronze-wing—very shy, and a denizen of the far bush; and the topnot pigeon. All, unfortunately for themselves, are excellent fare.

The bee-eater is the Beau Brummel of the bush, with plumage akin to, but brighter than, a kingfisher's. His diet is almost solely bees and he is therefore most unpopular. His nest is made at the end of a burrow which he digs in the sand to a length of four feet.

The Australian thrush is grey in hue, about the size of his English namesake. He has a glorious song but is seldom heard far from a river or other permanent water. Swallows, swifts, and martens—all migrators—abound, as do woodpeckers, finches of exquisite marking, wrens, tits, warblers and honey-eaters. There are several groups of family birds which live and nest in colonies. All are insectivorous and all are the possessors of fantails.

The cheekiest and most ubiquitous of all birds is the "Willy-wag-tail." This little sprite has no fear and is beloved not only of men but of horses and cattle. Perching on the horns or necks he makes short work of flies and other insect pests.

There are many types of cuckoos, of which the storm birds are the largest and most weird. They are seen only in the north, and seldom there—excepting in advance of, or during, stormy weather. They impose on crows to bring up their young. When the storm bird flies and his queer call is heard the bushmen make ready for squalls, and the bird is seldom a false prophet. Where he goes to in fine weather, as far as I am aware, is a puzzle.

Australia has three types of eagle, of which the wedge-tail, or golden eagle, is the most widely distributed. He is very powerful, having a wing-stretch up to nine feet. Small wallabies, young kangaroos,

and the larger ground and water birds were his usual prey before the advent of sheep. Now these eagles do quite a lot of damage among lambs, but they are rapidly being poisoned off. There are numerous varieties of hawks, and kites, and the crow is found in all parts of the Commonwealth.

Cockatoos, parrots and parrakeets are very plentiful and are scattered throughout the Island Continent and Tasmania. The sulphur-chested cockatoo often finds his way to England. Corellas—pink crested—and galahs—whose rose-pink and grey plumage mingles with delightful effect—are all good talkers and may sometimes be seen in cages in London. But the large black cockatoo, with his superb underwing of red and gold, will not adapt himself to captivity.

Of parrots there are dozens of varieties having gorgeous plumage. The most easily tamed of the parrakeets are the budgereegahs, or, as they are called in England, love birds. These little Australians are very adaptable and seem quite happy in captivity. But this bird must have a mate. If one dies, a mirror placed in the cage may comfort the survivor for a few weeks but another budgereegah must be secured, otherwise the survivor ceases to survive. Evidently they stood high in the estimation of the aboriginal blacks because *budgerree* (or *budgaree*) meant "good" in their language and *gah* 'bird.'

Several varieties of butcher birds—rather like large kingfishers—range over the continent. True to name they make the lives of smaller birds rather unhappy, especially at nesting time.

INTRODUCED BIRDS. English blackbirds and thrushes flourish in suburban areas in the south. Sparrows and starlings have proved very destructive to fruit and grain. They extend in immense flocks over the southern portion of the continent and are all too thoroughly at home. Bull-bulls, a type of finch, were introduced from India, but once again the experiment proved unfortunate, as the bull-bulls thrived and multiplied and are now a great nuisance to orchardists.

There are numerous ostrich farms in the several

States; the birds were introduced from South Africa. They thrive in the Commonwealth.

REPTILES. The largest but not the most important reptile is the alligator—for all I know he may be a crocodile—which is found in the coastal rivers of Northern Australia. Strangely enough these brutes do little damage. I cannot recollect ever having heard of a human being having lost his life as the result of their attentions, but a certain number of live-stock go to provide his sustenance, and no doubt a nice fat boy would not be despised. The alligator is especially partial to pork and dog. As there are many wild pigs along the northern rivers, and as dingos abound in those localities, the crocodile is able to be something of an epicure. The eggs are laid in the sandbanks, for incubation by the heat of the sun.

Turtles and tortoises of considerable size abound along the north coast and in the rivers in those localities. A small variety of tortoise is found in all the rivers, creeks and lagoons throughout Australia. All these reptiles deposit their eggs in the sand for incubation. The shells are less brittle than those of birds' eggs. Like celluloid, they can be dented. The contents are to all appearances, the same as in birds' eggs, and they are a favourite article of diet with the aborigines.

Frogs of every colour and variety abound. Many of them live in trees and seldom go near water, but they have one point in common—they all croak. In the swamps along the rivers—notably the Murray—the noise made by the millions of frogs can be heard during the still evenings, incredible though it may seem, at a distance of more than a mile.

There are plenty of snakes in most sparsely settled parts of Australia, and though many are venomous, one rarely hears of a death from their bites. In the first place few people are bitten because the snake is always anxious to get out of harm's way himself. Secondly, every man, woman or child, knows what to do if bitten. The curative action to be taken is taught in all schools and furthermore it is set out in an illustrated printed notice at all country railway stations and post offices. Many varieties of snakes are considered to be harmless,

but most people, for two very pointed reasons, kill the reptile first and make enquiries afterwards.

Iguanas—or goannas—are common in the bush, where they levy a toll on eggs, young birds, and domestic chickens. There are several types of these giant lizards, some of which are apparently amphibian. Lesser lizards abound, but with, I believe, one exception, all are harmless. The most fearsome looking are really the most docile. As a youngster I cultivated the acquaintance of a young goanna to the extent that although he was at large he would take meat out of my hand. Small lizards also were among my “pets,” but I drew the line at snakes. However, a boundary rider on Corinda had a tame carpet snake (non-venomous), which lived in his hut and, according to him, was “better’n a cat at keeping down th’mice.” Some people would have preferred the mice.

FISH. The rivers and waters along the sea-coasts abound in fish of wonderful variety. Piscatorial societies acclimatise trout, which are liberated in the local streams.

The most interesting indigenous variety is the cerotodus, or lung fish, found in Queensland rivers. This creature is another anachronism and should have been extinct in the dark ages. As its name betokens it has lungs, and actually slithers up on logs for a siesta in the sunshine. There was quite a sensation in scientific circles when this fish was first discovered. At least one cerotodus is to be seen at the Aquarium in the London Zoo. He does not look nearly so interesting as he really is.

Australia’s fishes are dealt with in more detail in a subsequent chapter on sport.

The matter contained in Chapters xvi, xvii, xviii and xix may perhaps be found to be of but little interest to the general reader. What is written is designed to appeal to those who are considering the advisability of trying their fortunes in Australia, and to people who have kindred rural interests in Great Britain.

Chapter XVI. Dairy Farming and Pig Raising.

Australia is a land of sunshine dairying. The farmer there knows not the discomforts and hardships of the snow-bound winter. At all seasons his cows find most, if not the whole of their sustenance in the natural pastures. He has not to resort to that housing and stall feeding of cattle which load costs of production in those countries that supply the major part of Europe's butter and cheese.

Few, if any, even of the oldest dairying districts of the Commonwealth have been developed to their full capacity—none, indeed, if judged by the intensive methods of the small countries of Europe.

In selecting a locality for this enterprise, one has a wide choice. He may settle in the southern temperate zone of Tasmania, or the tropics of North Queensland. These two points of extreme can both show the industry flourishing and expanding. Refrigeration and science in manufacture have, for all practical purposes, eliminated temperature as a governing factor in successful dairying.

Occasional dry periods must be expected, but such conditions are the exception, and they can always be provided against. In the agricultural countries of the Northern Hemisphere the equivalent of a drought occurs regularly every year during the winter season, when natural growth is arrested and hand-feeding must be resorted to. Drought has few terrors for the prudent Australian dairy farmer. Should his paddocks fail him for a few months, he has his reserves of lucerne hay and other fodders upon which to rely. It is rarely that a drought simultaneously affects the whole of the dairying territory of the Commonwealth and when anything in the nature of a general drought does happen along—perhaps once in twenty years—the localities least to suffer are the dairying districts, because they embrace the country having the highest average rainfall, and there is always *some* rain. The occasional dry period emphasizes the wisdom of providing reserve fodder, which can be conserved either in the dry state as hay, or green, as ensilage. For hay, lucerne is generally used. It is most prolific, and

a nutritious food for all live stock; as it is a perennial, once established it grows for an indefinite period of years. Although lucerne makes excellent grazing, more profitable results are secured from cutting the growth three or four times annually. Each cut will yield from one ton to two, or even three tons, of dry hay to the acre.

Ensilage is made by packing almost any description of green fodder into some sort of enclosed space. Formerly pits used to be sunk, then brick or concrete silos were erected, but it has now been found that the mere stacking of the green stuff—if it be rammed down tightly as the stack grows—effectively preserves its condition. Its own weight keeps out the air which would otherwise cause decomposition. When the stack or a silo is opened the ensilage is found to have turned brown in colour, but it is very sweet, and cattle, sheep or horses eat it with avidity, and thrive as a result. Maize or sorghum is generally used for ensilage. On rich plots as much as forty tons of maize crop may be taken off an acre and sorghum is nearly as prolific. But ordinary grasses, and even thistles, make excellent ensilage, the use of which is becoming more general from year to year.

Of all the grasses successfully introduced from other countries, none has thrived like *paspalum dilatatum*, which came from Brazil. It now covers hundreds of square miles of dairying country to the almost complete exclusion of other grasses. It makes extraordinary growth in summer, and is a wonderful wealth producer in the northern—that is the warmer—districts. All English grasses flourish in the cooler climes.

The dairy farmer is fortunately placed in that in the regulation of the industry, the governmental attitude towards him is sympathetic at every point. He is not left to his own resources to fight out the problems that occur on the farm or in the factory.

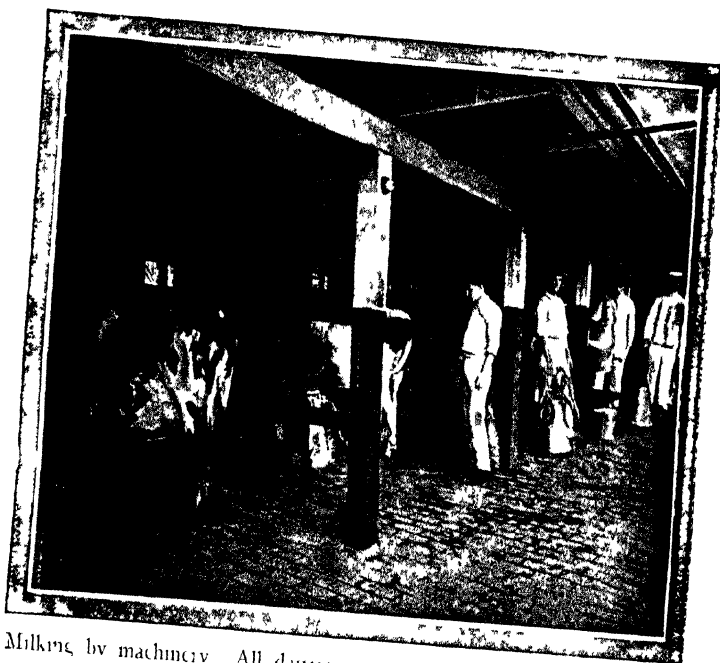
Each form of official supervision is designed to be educational. The inspector is really an instructor. He visits the farm, when need be, not to harass, but to help. The paternal interest of the government in the



Dairy Pastures, Western Australia, note pasture and modern farm buildings



Dairy Cows The cylindrical structure is a silo note mechanical elevator



Milking by machinery All dairies are under rigid official supervision

quality of the product begins at the farm. The dairyman's herd is inspected from time to time. The farmer is called upon to conform to certain regulations in regard to the construction and sanitation of his dairy buildings.

The law provides for the supervision of dairy factories—and the law is carried out. Legislation insists on the strict grading, in accordance with quality and butter content, of cream and milk upon delivery at the factory, and payment on a corresponding scale is *compulsory*.

The oversea export trade is under the control of the Commonwealth Government whose officers have power to prohibit the exportation of any goods which would be considered harmful to Australian commercial reputation. All permission to export is subject to the goods being correctly described as to quality, condition and weight at the time of shipment. There is thus a government *guarantee* that the product is what it is represented to be, and an assurance to buyers in the importing country.

The dairy departments bring other educational advantages within the reach of every farmer by means of lectures and a liberal distribution of literature upon the scientific and practical sides of his business. Youths desiring a thorough training may enter the agricultural colleges as students, for terms varying from six months to two years.

The life has many social amenities. It is primarily an industry of close settlement. No extensive area is required for the dairy farm—two hundred to three hundred acres suffices on the average.

The cows are generally milked for about nine months in the year, and the average yearly milk yield per cow, over the whole Commonwealth, is 300 gallons. This takes into account probably 20 per cent. of cows on other than dairy farms—cows that are milked for half-time periods and otherwise not seriously kept up to production. In actual experience dairy herds that do not average 400 gallons are quite below the mark. This milk yield represents 170 lbs. of butter as each cow's yearly return. That average is readily attained

by tens of thousands of cows over some of the most extensive settlements in various parts of the Commonwealth. The records of herd-testing associations show many herds averaging 250 to 300 lbs., in several instances without supplementary feeding. It is a simple matter to calculate the productive value of these various grades with butter at 1s. 6d. per lb. The 170-lb. cow gives a net annual return at the butter factory of £12 15s.; the 200-lb. cow, £15; and so on up to the 300-lb. cow, with £22 10s.

Dismiss any impression that this is the limit for either cow or herd. *The Australian champion officially-tested cow in the 1922 season produced 1,586 lbs. of butter in 365 days*, which was a record for the world. That cow was not treated in any way under artificial conditions to force production. The test records indicate plainly enough that the 500 or 600 lb. butter producer is not uncommon. The 170-lb. producer, however, is a paying proposition. Then, in addition, the 360 gallons of skim milk left after the separation of the cream is worth 2d. a gallon, or £3 for feeding pigs for the bacon factory, thus raising the cow's productive value to £15 15s.

About 5 per cent. of the milk produced in Australia is converted into cheese, and it is to be said that the proportion is increasing. The prospects point to further considerable expansion if London values are encouraging. In the main there is little difference between the net returns to the farmer from butter or cheese factory.

The War gave a remarkable stimulus to the condensed and dried milk industry which, relatively, has made exceptional progress. Within five years, from being an importing country, Australia has developed an export trade in milk worth more than £2,000,000 a year. The milk factories are located in districts of heavy production and where the supply is concentrated within a comparatively small area. The condensed or dried milk factories pay an equivalently higher rate for milk than is derivable from either butter or cheese; but there is no by-product to feed to calves or pigs. The establishment of this industry in Australia enabled

consumers in the Commonwealth to secure—at a low cost—full supplies of their requirements during the War when consumers in all other countries were experiencing the greatest difficulty in obtaining their needs; and Australia was, at same time, enabled to contribute very largely to the British and Allied Governments' war requirements.

The employee of to-day is the employer of to-morrow. Of no form of settlement can this more truly be said than of dairying. He who is determined and ambitious enough to get out of the ruck and become his own master does so, more often than not. It may take five years, or ten years, perhaps longer, but there is always room for that class of worker to reach his objective. There is no bar to the attainment in the future of what has been commonplace in the past. Commencing without capital the new-comer must take employment, husband his earnings, and await the day when he has sufficient money to avail himself of openings to obtain land on easy terms. A capable, hard-working man should soon command a wage of from 30/- to 40/- per week in addition to being provided with food and housing. As his living costs him very little, his savings in a few years should be considerable. But the new arrival should be prepared to accept £1 per week and "keep" until he grows accustomed to the work—a matter of a few months.

An *experienced* man with a family has little difficulty in finding opportunities of taking a farm as a going concern on the share system. Sometimes share farms are equipped with milking machines, but hand milking is almost universal in share agreements. There should be at least four hand milkers to handle a herd of fifty or sixty cows.

The usual arrangement is for the owner to provide a fully-stocked and equipped farm and for the shareman to undertake the whole of the work and management. The proceeds of the sale of cream and pigs are equally divided. The share farmer is generally required to cultivate a specified area to provide fodder for the stock and, perhaps, some maize or other food for the pigs. The owner finds the seed. With first-

class herds on good country working families have earned very satisfactory incomes on these terms. Shares-men, as the result of their own and their families' labour, earn up to £500 a year, and occasionally more.

This system is the stepping-stone to farm ownership. It gives the man, without sufficient capital to launch out for himself, his chance of accumulating enough money to make a start.

A farm carrying a milking herd of forty to fifty cows calls for plant and equipment on something like these lines :—Two active draught horses, at £25; two light horses, at £15; dray and harness, £50; spring cart and harness, £40; sulky and harness, £30; plough, harrows, and harness, £25; chaff-cutter £20; separator, £60; milk and cream cans and utensils, £20; copper or boiler, £3; tools £20; total, £348. The need for some of these items varies in differing circumstances, and some, again, might be purchased second-hand in good condition at reduced prices. In any case the requirements grow to this standard as the herd increases, and the dairy-farmer looks for conveniences that economize labour. It is a matter upon which hard and fast rules cannot be laid down.

The prices of good class dairy stock vary slightly in the several States, and even in widely-separated parts of any one State. The following may, however, be taken as an average basis :—Yearling heifers, twelve to fifteen months, £4 to £6; backward heifers, £6 to £8; forward heifers, £10 to £12; medium cows, £15 to £18; selected cows, £20 to £25; pedigree cows, £20 to £50 and upwards; pure bred bulls, £25 to £40 and upwards. Forward well-bred brood sows command £8 to £10 upwards, and boars £10 to £15.

There are approximately two million dairy cows in Australia. Among these the breeds of cattle in favour in the United Kingdom take a prominent place. The majority of the herds, however, are comprised of grades and cross-breds, practically all derived from good dairy stock. The pure-bred animal has due recognition and appreciation, and proportionately is increasing.

The great bulwark of the industry is co-operation among the producers. From a small beginning in the district in which the industry had its birth, and from which the first consignment of butter went to London, the system has spread over the whole Commonwealth.

The co-operative principle is more generally applied to the manufacture of butter than to other sections of the industry. About 75 per cent. of that product is turned out by the farmers' own factories.

PIG RAISING. The pig has a recognised place on the dairy farm as a consistent and substantial revenue producer. In the eastern States in particular, where the bacon industry is on a sound and up-to-date footing, pigs of a good class always find ready sale. Numerous co-operative bacon factories have been established by dairymen in conjunction with the butter factories. Under this combination of management there is economy in manufacture. The proprietary factories also are keen competitors for suitable pigs in all markets.

The breeds most favoured as giving the best returns and producing economically the desired weight and class of meat are the Berkshire, Tamworth, and Middle Yorkshire. Bacon pigs are sold on dressed weight at the factories, where 120 to 130 lbs. are the sizes most in favour. This weight is attained at about six months old. Heavy baconers kept back until nine months old range to 200 lbs., and are more suitable for the export trade. Prices for many years have not been below about seven pence per lb. *net* to the farmer. This may be regarded as a normal figure, and represents the settling down from the extreme rates during the war period.

The War greatly stimulated the bacon export trade, and, since local production exceeds home demands, the oversea market provides the avenue for the extension of the industry. In quality and get-up the Australian article has proved its suitability to London requirements.

As a converter of skim milk into pork the pig section of the dairy farm will add 25 per cent. to the return from cream. The pigs of the average farmer

with a herd of forty to fifty cows should bring him in £100 a year. That is not the limit, all depends upon the amount of other food produced on the farms.

Chapter XVII.

Fruits and Wines.

Every known commercial species of fruit attains perfection in Australia, where the range of climate and of soil admits of no restrictions upon the kind or quality of the fruit that can be grown.

The annual value of the fruit crop produced in the Commonwealth, irrespective of returns obtained from vines and dried fruits, amounts to over £6,000,000. This yield is won from an area of barely 300,000 acres.

Frost, the constant enemy of the orchardist in the thickly populated lands of the northern hemisphere, has few terrors for the orchardist of Australia. There is a wide enough choice of climate to escape the extreme rigours of winter, and really severe frosts rarely occur in any of the fruit-growing districts.

Fruit-growing is a specialized industry, and the new arrival should make full enquiry from government experts before either purchasing or planting an orchard. Neglect of this precaution may lead him into serious difficulties. Unsuitable variety of trees, or unsuitable localities, generally bring disaster upon the inexperienced grower. While thousands of families are living in comfort upon their orchards, others have failed through having, in ignorance, embarked upon hopeless propositions.

Each agricultural department shows keen interest in the advancement of the fruit industry within the boundaries of its State. The Commonwealth Government also, by supervisory regulations regarding the overseas trade, and concerning the arrival of fruit trees from other countries from which fruit diseases might be introduced, as well as by other means, endeavours to establish uniform conditions that are in the interest of those engaged in the industry.

Attached to each state department of agriculture is a staff of fruit experts whose duty it is to go among the orchardists and, where necessary, to instruct them concerning any matter about which they may need

information. These officers advise growers of the best known methods of cultivating and propagating their trees. As the pruning season arrives, the experts visit the different centres, and by means of lectures and demonstrations afford valuable instruction to all in need of advice. Another section of the staff is engaged during certain periods in showing how fruit should be graded and packed for market, or in advising settlers upon any of the numerous matters about which they desire enlightenment. Adequate precautions are taken to see that an orchard property is not allowed to become a menace to those adjoining. Usually all that is needed is a word of advice, but, if necessary, the supervisor has the power to compel a grower to carry out any work regarded as essential to the cleanliness and well-being of the trees.

The state governments have established experimental orchards, and much valuable work is performed at these institutions which are staffed by experts.

APPLES AND PEARS. Soils that are suited to apple culture are also well adapted to the growth of pear trees. By a wise selection of varieties it is possible so to arrange matters that *harvesting operations may be carried out continuously over four or five months of the year*. This disposes of any need to hire labour other than that employed in the general working of the property. Economies that may thus be effected permit an owner of a small area to reap the *full results* of his labour, and thus to add materially to his annual income. In Victoria, South Australia, West Australia, and Tasmania, and to a scarcely less degree in New South Wales, there is great scope for development in these varieties.

PEACHES AND APRICOTS. The progress made in canning and jam manufacture of late years has stressed the importance of particular attention being paid to the purposes for which apricots and peaches are grown. The success of this branch of the industry does not depend so much on any zone or climatic condition—for the trees flourish wherever planted—as on the special suitability of varieties for definite trade requirements. Certain qualities and appearances are essential in fruit

grown for the cannery. Factory managers, knowing what their trade calls for, are prepared to pay liberally for supplies. Plantations must consist of varieties chosen for the special purpose of supplying either the dessert or the manufacturing trade. Australia is in close touch with the markets of the East. The trade with the United Kingdom has been hampered owing to manufacturers not having realized its requirements. This experience has now been gained, though at some cost, and with the enforcement of strict grading regulations that have been decided upon, as well as studying the needs of each class of trade, there is every reason for confidence in the ability of the Australian output to attract the Home consumer. The quality of these canned fruits *must* ultimately command attention in all the great markets of the world. Since the fresh fruit has no rival in quality, the question of preserving it to meet each class of trade presents no insuperable difficulties.

GRAPES. Grape vines are a remunerative asset when grown in suitable soil, under equable temperatures, and with an abundance of sunshine. The heavy yields and high sugar content of the berries prove conclusively that Australian conditions are in an outstanding degree conducive to the successful growth of the vine. There are few forms of fruit production that can offer greater attractions than viticulture when viewed from the standpoint of wine production. Tasmania is the only State where vines are not extensively cultivated. The immense possibilities of this industry are illustrated by the prices that have ruled for some years past for wine grapes. Wine-makers are prepared to enter into long contracts to purchase the berries at a fixed rate of £10 a ton, and in many instances that price has been considerably exceeded.

Great care is taken to blend the right kinds of grapes to get the best results. One type is introduced to give the wine the correct colour, another to result in a pleasing "feel" in the mouth, a third for its aromatic value to give a proper bouquet, and the *tout ensemble* must please the palate and warm the heart.

To make white wines the juice is pressed out of the



An orangery beside Hawkesbury River, New South Wales.



A Peach orchard. Trees are not permitted to grow any larger than as shown; note how thoroughly the ground is cultivated.

must *before* fermentation. For coloured varieties the skins ferment with the juice, for it is the skins which impart the colour.

CITRUS FRUITS. Irrigation in New South Wales, Victoria, and South Australia has done much to focus attention on citrus culture. Some idea of the value of the orange crop to growers is gained from the following statistical figures of production and value: During the 1921-22 season, and with an area of about 25,000 acres under cultivation, the value of the orange crop in New South Wales was £671,570, or a gross return of slightly more than £27 an acre. Queensland, with 4,153 acres, produced fruit to the value of £118,316, or an average gross return of £28 an acre. South Australia, with 4,500 acres, obtained £133,167 an average gross return of £30 an acre; and Western Australia, with 3,267 acres, produced fruit to the value of £122,548, an average gross return of approximately £38 per acre. Figures for Victoria are not available, though those already mentioned show that the average gross return throughout the Commonwealth is approximately £30 an acre. Thus, with under-supplied local markets, and the prospects of developing an export trade, it is evident that orange-growing has much to commend its consideration.

Passion fruit, the cultivation of which is even more remunerative, is allied to citrus culture because the general practice in New South Wales and Queensland is to grow the vines between the rows of trees while the latter are coming into bearing. This crop has in many instances more than paid the cost of establishing the citrus orchard, for while its productive life seldom exceeds seven or eight years, it has by the end of the period well served its purpose.

OTHER FRUITS. The shortage in supplies of cherries has enhanced the demand, and they are, as a rule, sold at high prices.

Prune-growing, is an enterprise capable of great expansion. There are many instances of settlers living in more than average comfort on the profits derived from ten-acre blocks planted with these trees.

The Australian market is not adequately supplied

with the berry fruits that may be grown in almost unlimited quantities in the different States.

In the irrigated districts of the various States, as has been said, water for the trees is available when required, whilst that collected in tanks from the roofs of the dwelling and out-houses supplements that needed for ordinary domestic use. Conditions differ in the non-irrigated districts. These, naturally, are served by a reliable rainfall, otherwise it would be impossible to carry on any form of fruit culture. The domestic requirements are in these instances provided for by a series of iron tanks, which collect all the roof water.

RETURNS. There are many orchardists who do not obtain more than £20 an acre, or £200 a year from a ten-acre plantation of trees. This is due to an unwise selection of the varieties planted, to bad management, and to failure properly to comprehend the work that has been taken up. Yet an orchardist situated nearby, under identically similar conditions, may be securing £300, or even £500, as the result of his labours expended in the management of an orchard of similar area.

It is to be noted that fifteen acres is the maximum area that a practical orchardist can look after economically.

PRICES OF LAND. The value of uncleared land on the fringe of an established orcharding centre varies considerably in accordance with the extent to which a district has developed. Sometimes virgin land may be obtained from £4 to £8 an acre, whilst land elsewhere—no better suited for fruit growing—may range upwards to £30 an acre. Dealing generally with this aspect of the question, virgin fruit land may be secured on extended purchase system up to five and ten years, on the basis of from £7 to £30 an acre. It is preferable that land should be purchased near an established fruit-growing centre, even though a slightly higher price has to be paid for it, than that cheaper land be bought in districts where there is no settled experience to guide the newcomer. Settled centres afford more opportunities for securing employment during those periods when the young orchard is not

in need of attention, and much valuable experience may be advantageously gained in this way.

The costs involved in the establishment of a vineyard vary only in minor details. Suitable land may be obtained at about £15 an acre. The total outlay needed to bring the vines into bearing amounts to from £45 to £50 an acre. The difference is largely accounted for by the desirability for subsoiling* the land prior to planting it with vines. The figures mentioned are based on the work being performed by *hired labour*. A settler would normally do most of the work himself and his out-of-pocket expenses would not exceed £10 an acre.

In the larger irrigation settlements the vine-growers' energies are chiefly directed to the production of raisins, currants, and sultanas, but many of the settlers derive a comfortable living by growing particular varieties for the purpose of supplying the distilleries.

WAGES PAID. The wages paid in the fruit-growing industry are indicative of its prosperity. These have been fixed by industrial agreement, in accordance with the different classes of labour performed. Thus, in States where the agreement applies, males and females engaged in the harvesting of the crop are paid 80/- a week; those between the ages of fifteen and eighteen years of age receive 70/-; and others engaged in special classes of labour connected with the curing of the fruit receive 86/- a week. Females employed in cutting and stoning fruit for canning and drying fifteen years of age and over, are paid at the rate of 60/- a week, and under that age may receive 50/- a week. The wage for permanent horse drivers is 75/- The hours are eight a day, and 48 a week. These figures apply chiefly to districts in which the fruit-drying and canning industries are carried on.

There are thus excellent prospects for married men with families, who take up fruit-growing in such districts, to obtain remunerative occupation during certain seasons of the year for themselves and their families.

* SUBSOILING. Ploughing to a depth of about 15 inches.

ing demand for tomatoes, either in a fresh condition for market or for manufacturing purposes, their culture is rapidly extending. Tomato growing, by reason of its returns—when conducted by skilled cultivators—is regarded as a special industry. In many instances it is the source from which the main income for the year is derived. Of recent seasons, returns varying from £40 to upwards of £100 an acre have been obtained by those producing this vegetable.

Numbers of recent settlers, and more particularly those who have engaged in fruit culture in various irrigation centres throughout the Commonwealth, have found tomato crops to be of great assistance in enabling them to tide over the period of waiting until their fruit trees come into bearing. The cultivation of this plant under glass as a commercial enterprise is as unknown as it is unnecessary in Australia.

POTATOES AND ONIONS. Potato and onion growing, on account of their remunerative nature, are two industries that attract increased attention from year to year. The cultivation of these crops is carried on close to the more important towns. Both industries are now of very considerable importance, that of potato growing being worth more than £2,500,000 a year to the Commonwealth.

BROOM MILLET. The growing of broom corn, or millet, for the purpose of providing material for manufacturing is an industry that is capable of development.

HOP GROWING. Hops flourish best when grown in the deep loamy soils and in valleys where the surrounding hills provide ample protection from high winds. In the southern States of Victoria and Tasmania there are innumerable situations that answer to this description and which are ideally suited to the cultivation of this vine.

NUTS. No great attention has been paid to the opportunities that exist for making nut growing an important and remunerative industry in the several States. For many years production has been carried on in a more or less desultory manner. Considerable quantities of almonds are produced each year from

trees that have been grown in shelter plantations around orchards. In these positions the trees receive little attention, yet they frequently contribute fairly large sums to the revenue obtained by settlers.

Chapter XIX. Sugar Cane and Tropical Fruits.

Remarkable progress has been made of recent years in the agricultural development of the tropical east coast of North Queensland. The old theory that for the white man to live, much less to work, in the agricultural tropics in any part of the world was to seek an early grave—however true in reference to other continents—has been entirely exploded as far as Australia is concerned. Thousands of farmers have been for the past twenty years, and are still, tilling the soil of North Eastern Queensland to their considerable advantage. And be it remembered that there is *no coloured labour available*. Everything must be done by the European.

It has been proven beyond all controversy that white men and their womenfolk and children thrive in the Australian tropics as exceedingly as in the most temperature southern Australian latitudes. And the death rate in Australasia is the *lowest in the world*.

SUGAR CANE. The actual area under cane in Queensland is one hundred and eighty-five thousand acres, and in New South Wales thirteen thousand. There is now about £15 million invested in the Queensland industry which is the most important agricultural enterprise in the State. No other rural pursuit employs so much manual labour. The industry keeps sixteen thousand adult Europeans fully occupied all the year round at wages from £4 to £5 per week. In 1922 the yield of cane exceeded three hundred and six thousand tons.

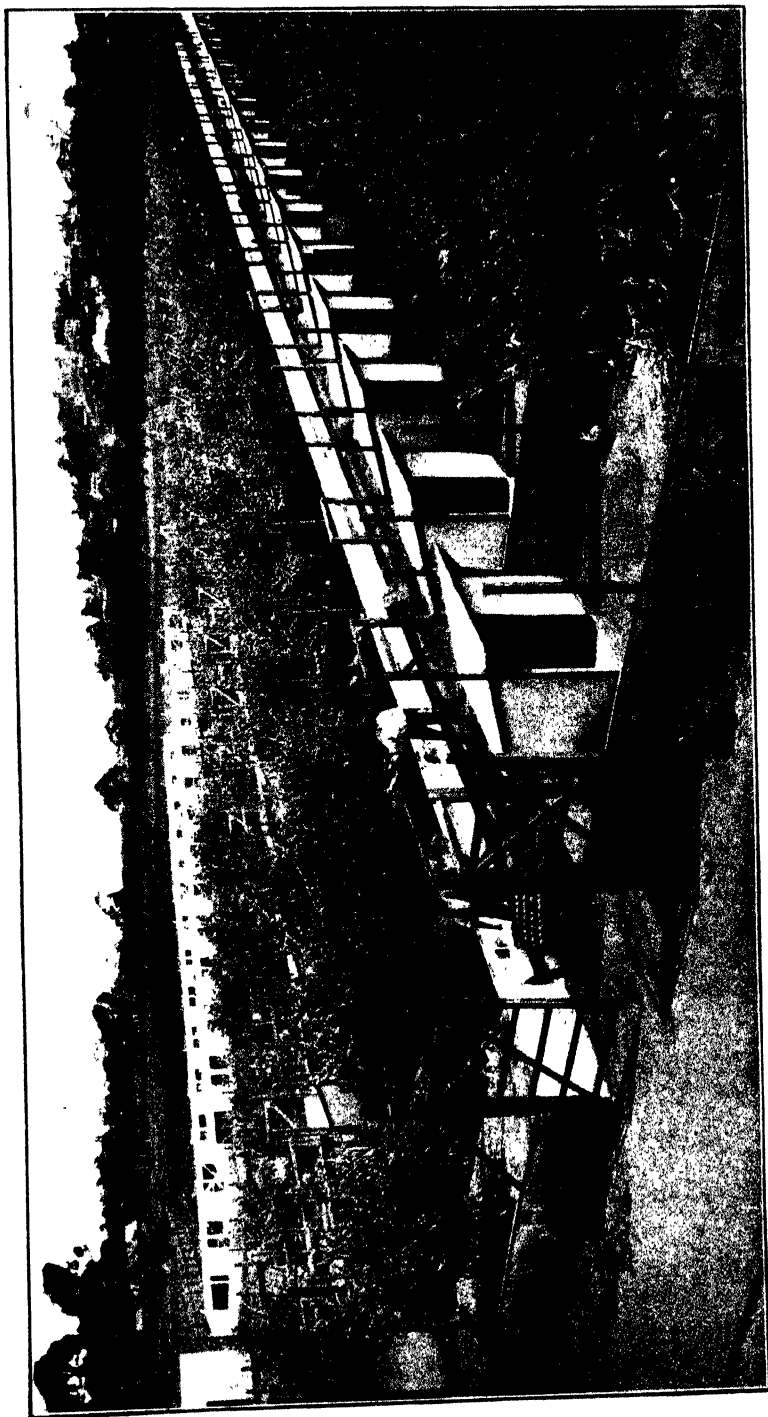
The production of cane sugar in the Commonwealth is never likely to cease to be a profitable industry. There is now nearly enough produced for ordinary consumption; but an exporting trade in jams, jellies, condensed milk, biscuits, and confectionery, is being built up, and largely increased supplies of sugar will be required to supply the rapidly growing demands

of these industries.

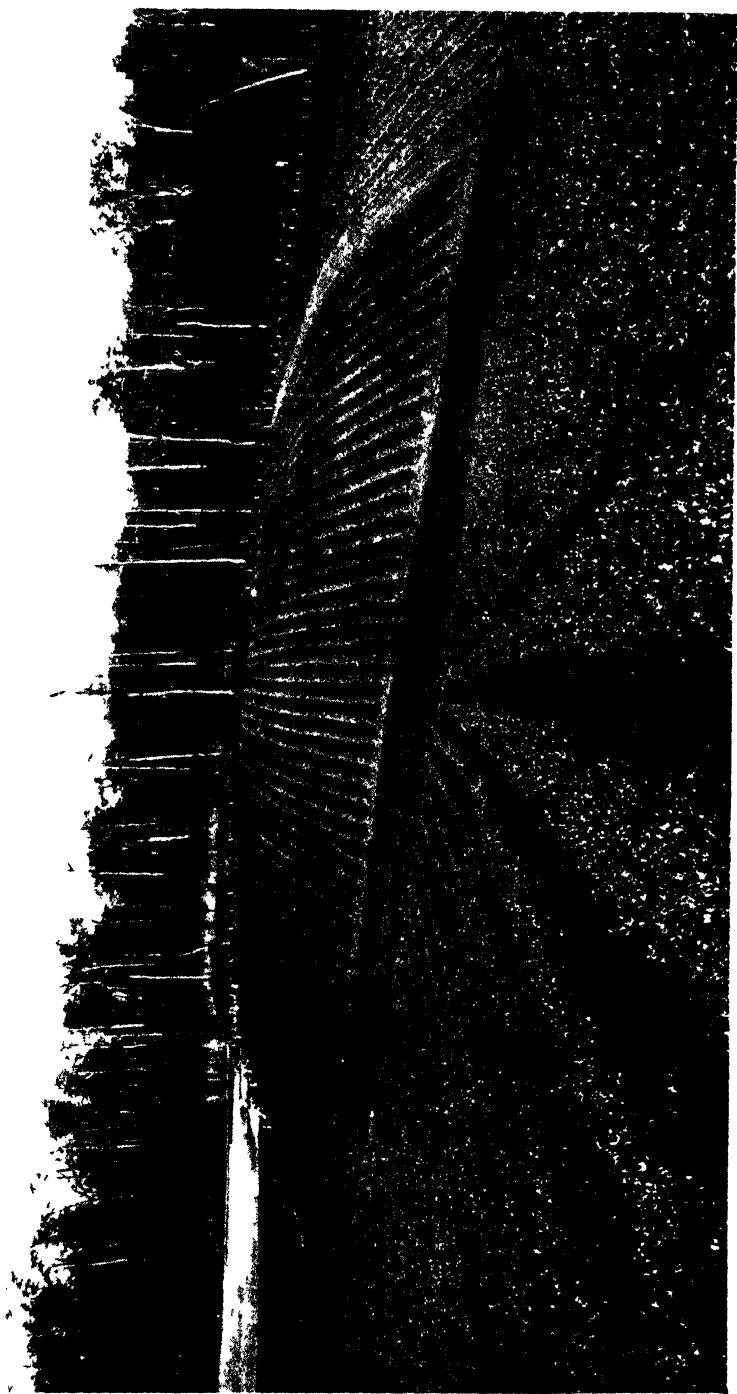
Though there is a large area capable of growing the cane, it is necessary that the land chosen shall either be within reasonable distance of an existing mill, or in a locality in which it has been decided to establish a mill. Of such well-situated land in Queensland it is estimated officially that there are at least half a million acres, including the one hundred and eighty-five thousand acres now under cultivation. This would provide for a large number of additional farms, attached to each of which would be sufficient grazing land for the settler's horses and cows, and ordinary land for homestead cultivation.

The industry is fully established and capable of great expansion; it is already quite as well organized and equipped as any other kindred industry in the world. It has its experiment stations, its scientists, and its technical advisers. One of the principal objects of the experimental farms is the selection and introduction of new varieties and their commercial testing. But before any new cane is allowed to leave these institutions it has to undergo chemical and commercial trials. These are combined with agricultural tests in the field, so that it may be determined whether such varieties are good croppers. New types are carefully watched for evidence of disease, and no affected canes are allowed to go into distribution. The sugar experimental stations analyze soils free for cane-growers, and give advice at personal interviews or by letter on the requirements of the soil in the way of cultivation and the application of fertilizers. Cane samples are tested free of charge, so that growers may know the best time at which to commence cutting. Field officers move around amongst farmers, giving advice on all cultural operations. The work of the various mills is under efficient control by analytical chemists, and the farmer is paid for his cane according to its quality (or sugar contents).

For a number of years there has been a steady improvement in the quality of the canes grown, in the methods of cultivation, and in the mechanical work of extraction at the mills. This has resulted in a steady



Modern Poultry Farm (Victorian).



Contrast virgin bush (with ring-barked timber) and three years orchard development

increase in the production of sugar to the acre, and a reduction of the amount of cane required to produce a ton of sugar. A few years ago the proportion was ten of cane to one of sugar; to-day the average is seldom as much as eight and a half to one. In 1904 an output of two tons of sugar to the acre was exceptional; during the past decade the exception was for the production to fall below two tons.

In the southern districts the crop may take twenty months to reach maturity; in the north as short a period as twelve to fourteen months suffices. After the first cutting the roots remain in the ground, and from them spring ratoons or re-growth for the following year. Thus the cost of the second crop is very much less than that of the first. Cane has thus been re-grown for many years, but more than two ratoons is not considered good husbandry.

Farmers give various estimates of the cost of producing a ton of cane. These range from twenty shillings to thirty-five shillings according to the seasonal conditions and consequent yield.

TROPICAL FRUITS. The chief fruits of the tropics are bananas, pine-apples, mangoes, pawpaws, and various kinds of citrus fruits. All these, when planted in the right soil and given the necessary attention and care, yield good crops of high quality. The banana, which is a native of the tropics, thrives to perfection, though recently, owing to the attention that has been given to sugar, large areas that were formerly devoted to this crop are now under cane. With the extension of the main coastal railway, very large areas of land that are admirably adapted for the culture of bananas will be made available, and in all probability there will be a revival of the trade. Pine-apples, although well suited to the tropics, are grown more extensively in the southern districts of Queensland and in the north of New South Wales.

The mango is absolutely at home in the tropical districts, the tree growing to a large size, and producing enormous crops of fruit which find a ready market. The pawpaw, like the mango, excels; it is used in its green state as a vegetable, and is also a luscious

fruit. The tree grows readily from seed, and in less than eighteen months from the time of planting a crop of fruit is to be gathered.

Citrus fruits thrive to perfection. Mandarins—or tangerines—of various kinds, and all classes of oranges do well. Amongst other fruits the granadilla, which is a species of large passion fruit, thrives and meets with a ready sale. The ordinary passion fruit is more adapted to the south. The avocado pear, one of the most delicious fruits of the tropics, forming a perfect vegetable salad, and custard apples of kinds do fairly well, but the latter are not equal to those produced in the more southern parts of the State. Practically all the tropical fruits of the world can be grown under favourable conditions. On the table-lands inland, at an elevation of from two to three thousand feet, several species of grapes are produced, as well as deciduous fruits, such as apples, Japanese plums, quinces, and persimmons.

VEGETABLES. On the tropical sea-board, sweet potatoes, yams of different kinds, taro, beans of many varieties, white turnips, beetroot, cabbages (both European and Chinese), cucumbers, melons, squashes, pumpkins of all kinds, tomatoes, and several other vegetables can be grown with very little trouble.

MAIZE. It was once customary for settlers to plant maize as a first crop soon after taking possession of their land. They would fell the scrub, burn it off some months afterwards, and plant the seed by hand amongst the stumps. It was a rough and ready process, but it gave the farmer an early return from his land while he was proceeding with more advanced work. To-day maize-growing vies with that of sugar in the extent of the land under crop in Queensland. While there are some localities in Victoria where maize is grown for the grain, it is mostly used in that State as a green fodder or for ensilage. The two principal grain (maize) producing States are New South Wales and Queensland. The industry has been successfully tested in Western Australia and also in the Northern Territory, but there additional population is necessary to its expansion. As is the case with sugar, maize

culture is steadily increasing in the tropics. The total area harvested in the Commonwealth in 1922 was over 300,000 acres and of this 135,000 acres was in Queensland. The returns vary in the several States according to the quality of the land and the nature of the cultivation. On well-managed farms in suitable localities an average of from fifty to sixty bushels per acre is obtained.

COFFEE. The many hills along the tropical coastlands, with their rich volcanic soils and excellent drainage, offer ideal locations for coffee cultivation.

OIL PLANTS. The castor oil plant grows with the greatest freedom all through the coastal tropics, but so far the industry has not been placed upon a commercial basis. Investigations made under the direction of the Commonwealth Institute of Science and Industry proved that even the beans from the trees which grew wild yielded almost as much oil as the imported seed. Imports of castor oil, and also of the beans from which the oil is extracted in Australia, show that there is a very large local market for this product within the Commonwealth. Another oil-producing plant is the peanut, which flourishes in many parts of Australia as well as in the tropics. Peanuts make excellent hog-feed, the pigs rooting up the nuts, which grow like potatoes. The industry is capable of much expansion. The peanut is a popular human diet, so much so that the annual importation into Australia approximates two thousand tons.

COCONUT. The coconut thrives along the seaboard throughout the tropics. No settler close to the sea should neglect to plant coconuts. There is probably no tropical growth that yields a greater abundance and variety to the use of man. The fibre surrounding the kernel of the fruit supplies the coir of commerce, the dried kernel the copra from which the coconut oil, glycerine, and oilcake, are derived for the manufacture of margarine, munitions, and soap, and for the feeding of live stock.

CASSAVA. In years gone by cassava has been experimentally grown throughout the tropical coastal areas. Of late, its cultivation has been taken up

seriously as far north as the York Peninsula and it is anticipated that Australian tapioca, made from cassava, will shortly take the place of the tapioca imported from the Dutch East Indies. The plant has many uses, and is particularly prolific. It yields up to twenty tons of tubers per acre, and, according to scientific experts, should have a value for the manufacture of power alcohol.

Chapter XX. Cotton—Wonderful Opportunities.

Quaint fables surrounded the introduction of cotton into Europe. The soldiers of Alexander the Great on returning from India described a curious tree which yielded vegetable wool whereof the Indians wove wonderful garments. A strange mythology grew up around the cotton plant, which was credited with being an animal rooted to the soil. Herodotus described the shrubs as "plants bearing fruit within which there is a lamb having fleece of surpassing beauty and excellence."

After a lapse of over two thousand years, cotton now provides the world with nine-tenths of its apparel. It is used at a daily increasing rate in every quarter of the globe. When missionaries sally forth to convert the heathen, there may be some diversity of opinion as to the literature they take with them, but all sects and creeds may be relied upon to be of one mind in carrying large quantities of cotton shirts and trousers.

Cotton goes hand in hand with civilisation. As the education of the savage proceeds he develops a proper pride in the possession of *two* pairs of trousers. The more enlightened people become the more clothes they want. The desire to be better dressed is world-wide. It is not spasmodic nor is it restricted to sex or class. It has come to increase.

During the last twenty years cotton has found many avenues of utility, apart from clothing, to describe which many volumes have been written. After being chemically treated, it now serves as a substitute, wholly or in part, for wood, cane, leather, and even iron. It is able to supplant—for many purposes—ivory, tortoise-shell, ebony, amber, whalebone and even

earthenware. It is a most important ingredient in explosives. In fact there seems to be only one use to which mankind cannot adapt cotton-wool in that it has not so far served as an article of human diet. The seeds yield large quantities of meal and oil. The former is excellent food for stock. The latter commodity is used in soaps and paints, as fuel, and for numerous other purposes. In that it is also used for cooking and in salads, the oil actually is an article of human food.

The country which produces most of the raw cotton of the world is the United States. But the Americans manufacture as well as produce, and the manufacturing needs are tending to absorb the greater part of raw material available. The pink boll-worm and the boll-weevil have, of late years, devastated millions of acres under cotton in America, and have seriously affected the production of the raw material in quantity as well as in quality. It is officially estimated that these insects destroy the equivalent of 6,000,000 bales of cotton—or one-third of the crop—annually. America has been unable to cope with the depredations of the pests owing to the lack of skill of the negro cultivators, who are apathetic by nature and indifferent to the importance of keeping down the pests.

The spinning and manufacture of raw cotton is one of the chief industries of Britain, yet the bulk of the raw material required by British spinners and manufacturers is grown in foreign countries. The contrast between England's position in regard to cotton and wool during the period of the Great War provided the most striking example of what seems to be the improvidence of Great Britain depending on foreign sources of supply for raw materials. A study of that contrast should surely convince any sceptic of the urgent desirability for the Empire's becoming as self-supporting in respect of all raw materials and foodstuffs as it is in regard to wool.

It has been calculated that the annual increase in the world's requirements for raw cotton is 500,000,000 lbs. Of the 1,650,000,000 inhabitants of the globe about a half are only partially clothed, according to

civilized standards. One sixth—pending the arrival of missionaries—wear no clothing at all.

Without doubt, a cotton famine threatens, and this will affect Lancashire more seriously than any other place in the world. It is therefore of vital interest that cotton-growing lands within the Empire should be exploited.

Australia is now perhaps the most promising field. The industry is being developed and extended in the Commonwealth in a characteristically thorough manner. The anticipated difficulties attendant on the providing of labour have been overcome. So far, most of the cotton that is grown is produced by mixed farmers, that is to say those who do not rely on only one form of agriculture. The mixed farmer may carry on dairying, pig raising, wheat growing, fruit culture and sugar cane production. He might conceivably embrace *all* these enterprises and cotton culture in addition.

There is no rush of work in cotton growing except at harvest time, and the same state of affairs applies to the culture of wheat and most fruits. Cotton gathering is very light work at which women and children can safely be employed. The picking season lasts not more than two months, and additional casual labour can be secured for that period. Bands of men travel throughout the Australian States doing seasonable casual work. Sheep shearing provides much of this, as do fruit picking and sugar cane cutting. No such work requires any great skill. Any man with a reasonable amount of commonsense can become adept at any of the callings mentioned.

There is little fear of industrial disturbances resulting in strikes during the cotton harvest. Men seldom strike unless they know that by so doing they can paralyse an industry. The utmost they could do in regard to cotton would be to cause great inconvenience and perhaps some loss. On the assumption that the average farmer has a family of four who are able to assist at harvest time, as a general rule he would not require to employ more than two outsiders for picking up to forty acres in less than three weeks.

Assuming that the farmers in a given district number 50 and that they employ 100 men at harvest time. These employees, scattered as individuals over the 50 farms, would find it difficult to organise a strike, and, even if they did so, the worst that could happen would be that about a third of the crop would be delayed in being gathered, and it might depreciate in value as a result. Industrial disputes do not seem likely successfully to militate against cotton growing.

The Australians have profited by the bitter experience of the United States in regard to the boll-weevil. It is thought that perennial cotton (or cotton trees) harbour and encourage parasites and other pests. Therefore in Australia the cotton is planted annually, and after harvest all the bushes are burnt off. Weevils and other insects have very little chance of thriving. Legislation has been introduced forbidding the growing of perennial cotton and compelling farmers to burn off the annual bushes immediately after harvest.*

As a further precaution no seeds are permitted to be planted unless they are supplied from the Agricultural departments. Before issue, such seeds are passed through a period of quarantine and are submitted to fumigation. Such precautions further militate against insect pests. All seeds are selected with a view to adaptability to various soils, and only the varieties which will produce the best staple are allowed to be sown.

Careless farming is prohibited by law. If a farmer plants an area of cotton and does not take every precaution to combat insect pests, the authorities step in, condemn the crop, and order it to be destroyed at once. In the same way, various weeds which thrive in cotton fields and minimise the cotton output are declared noxious. The careless farmer is ordered to take steps

* Since I wrote the above, brief cabled advice has reached London that the legislation prohibiting the growing of perennial cotton in Queensland has been modified, but details are not yet available. If, as is likely, ratooning—under rigid governmental supervision—is in future to be permitted, the intelligent cotton farmer will be able to avert a rush of work even at harvest time—by arranging that the cotton ripen over a period exceeding five months.

There are three types of growth: *a.* seed cotton—planted annually. *b.* sprout cotton—allowing the plants to become perennial, and pruning them each year; *c.* sucker cotton—which occurs only in those few districts where there are frosts at certain seasons of the year. As the name implies, the new growth is from the base of the plant and not from the old branches. Under such conditions a careful grower could harvest from both *a.* & *b.* (or *c.*) types of growth, the bolls from which ripen, and have to be gathered, at different times.

I have been authoritatively informed that in the United States the whole of the harvesting must be effected within three months. The advantages of having a picking season extending over nearly half a year is surely obvious.

to kill any such weeds in his property, and if he does not do so in a given time the authorities take the work in hand themselves and compel the farmer to pay the cost. Such measures are in the best interests of the growers themselves, and it was at their request that these safeguards were introduced. By these methods does Australia hope to become one of the greatest cotton producing countries in the world.

The fact that cotton is being successfully and profitably produced and that it promises to become a great national industry in the Commonwealth, must surely create a sense of hopeful satisfaction, not only in Manchester, but throughout Great Britain.

A great deal of British capital is now invested in cotton culture in Soudan, and in Egypt which is now no more a British country than is Turkey. Soudan is in a state of active unrest. But, national disorders and complications apart, there is considerable industrial—*cum*—political turbulence and with that comes the danger of industrial boycott for which the British grower, who relies upon native labour to harvest his crop, may have to pay dearly.

Nothing of the kind is to be feared in the Commonwealth.

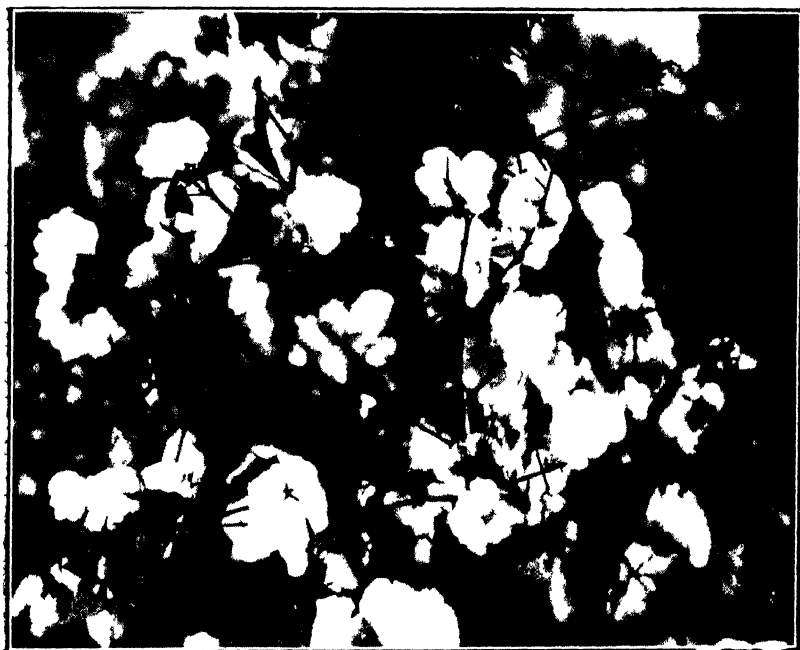
The controllers of the manufacturing industry in Great Britain, with their immense financial resources, can do everything to make Australia as valuable to the United Kingdom as a cotton producer as she is in regard to wool. The British Australian Cotton Association—working in collaboration with the State and Commonwealth governments—will welcome any form of co-operation. English spinners might fix a price for cotton of a prescribed staple, provided a certain amount were marketed in given periods. The spinners could themselves finance and establish plantations on a large scale or on a share-farming basis. The ways in which the desired result can be achieved are legion.†

The greatest portion of cotton already produced has been grown in Queensland. According to the *Australian Cotton Grower*, the industry's official

† The British Australian Cotton Association has an office at 27, Old Broad Street, E.C.2.



Banana culture South Queensland



How cotton grows



Maize or Indian Corn - four months growth



Jerseys

mouthpiece, the cost of production and freight on cotton from Australia c.i.f. Liverpool is about 10d. per lint pound. The same journal sets down the similar cost of the same product from the United States of America at 12½d. per lint pound. The *Annual Cotton Handbook* for 1923 (latest issue) published in England, shews that the average American cotton yield for 1922 was 349.5 lbs. of seed cotton to the acre. The maximum American yield for twenty six years survey was 651 lbs. (unginned).

Mr. Richard Harding—Secretary to the British Cotton Delegation to Australia, 1922—has recently published a book† wherein he shews that the average Australian yield exceeds 600 lbs. of seed cotton per acre; and that is more than seventy per cent. greater than the American average yield for 1922. Mr. Harding is confident that Australia will handle cotton production in a capable manner.

I would reiterate that the weight of *wool* per sheep has been increased by 400 per cent. since the animals were first introduced to the Commonwealth, and it is reasonable to expect that the Australians will succeed in increasing the annual yield of the cotton plant. It may safely be predicted that they will devise an economical means of harvesting, if what they have done in regard to *wheat* be any criterion.

Chapter XXI.

Enthusiasm in Education.

The reader cannot but have been impressed by the Australians' determination to be educated, as evidenced throughout the chapters dealing with the various rural industries under closer settlement. We saw that the wheat, and the dairy farmers, the fruit growers, the producers of tobacco, cotton—and those cultivating all other manner of farm produce—were under constant educating influences in the way of supervision and advice.

Catholicity of education along standardised lines—up to a point—is the very basis of all and is practical in fundamental socialism—using the word in its proper, rather than its popular, sense.

† *Cotton in Australia*, by Richard Harding, published by Longmans, Green & Co.

It is doubtful whether there are any people in the world more practical in their general educational systems than are the citizens of Australia.

Primary education is both free and compulsory throughout the Commonwealth. Its control or supervision is vested in the various State governments. Control is applied to the free state schools; supervision to those privately owned or conducted. There are minor differences in administration and curricula among individual States but the broad principles and their application may be said to be generally uniform.

There are considerably more than nine thousand state primary free schools throughout the Commonwealth, and certainly not a week passes without the number being added to. The curricula, in addition to providing a comprehensive interpretation of the three R's, embrace such subjects as singing, painting and drawing. The elementary practice of these subjects serves to discover talent that might otherwise always remain latent; and apart from that, any artistic sense is encouraged so that even though the pupil has no natural aptitude himself, he—and always she—learns to appreciate the talent of others. The aim is to develop the mind of the child on general, rather than particular, lines. Considerable time is devoted—for example—to nature study.

The influence of environment on youth is recognised in a practical fashion. Although there has always been a high standard maintained, in recent decades there has been a marked improvement in the type of buildings erected for schools and in their interior lay-out and furnishings. The first aspect considered is the health of the child, and ample air space and ventilation is provided in all rooms. Care is taken to ensure that there are large play-grounds; drabness in architecture is avoided. The walls of the school-rooms are hung with good pictures of educational interest. The cinema plays its part.

But in addition to the artistic and sympathetic appeal which is made to the child mind, the pupils are taught much that is practical. There are sewing and cooking classes for girls; the boys learn something

of carpentry, and other trades.

All schools are encouraged to establish and maintain flower gardens. The government provides trees, plants, seeds and fertilisers. Where water is not otherwise available, wells have been sunk and wind-mills erected at government expense so that the gardens shall not suffer from absence of rain. Elementary horticulture can be made a most interesting study if the knowledge gained is put into practice in the school garden. In an agricultural district the state school is by way of being a diminutive rival to the experimental farm. Wheats are bred by the boys, and the result of the work on the school plots is watched with a delighted interest; and similarly with other rural industries.

It must be obvious that the country and outer suburban schools have more scope for this sort of thing than those situate in the cities and congested suburbs. But a school without a garden is an exception to the general order.

Every effort is made to inculcate in the minds of the pupils a proper civic sense. At election time—whilst party politics are religiously eschewed—the youngsters are initiated into the intricacies of proportional representation and preferential voting. Mock elections are held, certain lads and lasses conducting the “polling booth,” others acting as scrutineers; all record a vote. Civics—or the elementary art of government—takes its place in the curriculum of at least one State and the scholars are taught something of the functions of the various governing bodies that control the destinies of the people.

Once a week the full personnel at all schools forms a hollow square about the flag pole. The children repeat a simple oath, in such words as: “I swear to love God, and my country, to serve my King and to obey my parents.” At a given moment the flag is unfurled and the National Anthem is sung with a deal of youthful fervour.

It is recognised that one large well-equipped and staffed school is able to render more efficient service than two or three smaller institutions. Even in country

districts every effort is made to establish and maintain large schools. But children must not be penalised on that account. It is recognised that if scholars have to walk long distances to their studies they are tired at the beginning of the day's work. In agricultural districts, as has been said elsewhere, many of the children have ponies, but in mining localities the youngsters are not so fortunate; so the government steps in and provides transport if by so doing a comparatively large school, rather than two or three small ones, can be justified.

It is an exceedingly noteworthy fact that £23,000 has been spent in a single State in one year on transportation of this description.

Proper attention is paid to the health of the child. The teachers are expected to take a parental interest in those few of their pupils who are obviously neglected in their own homes. When the doctor makes his regular periodical inspections, children who have been noted as having frequent recurrences of ill-health are made the subject of special examination, followed by proper treatment. Dental clinics are doing excellent work. Mouth troubles in mature life are more often than not the result of neglect of teeth during childhood.

In districts where the population is so sparse as not to warrant the erection of a school-house various methods are adopted to ensure that instruction is nevertheless imparted. The teacher in such cases visits homes in turn, neighbours making a room available during successive weeks. Sometimes the instructor is provided with a caravan. A tent is carried for use as a school, as are books and other apparatus required.

Outback, where long distances have to be covered, the bush schoolmaster is always provided with a motor or other vehicle, and it may be three or four months before he returns to his starting point.

The pedagogue is always welcome. If there be room in the house or hut he is accommodated, but if he sees that inconvenience would result he pitches his tent. Bush teachers grow wonderfully tactful. They stay maybe a week at a boundary rider's hut or station homestead, and until the next visit lessons must be

imparted by correspondence. While the teacher is at a homestead he keeps in touch with all the children on the property by telephone.

In one State last year itinerant teachers travelled sixty-two thousand miles to impart instruction to 1,806 children living outback.

Savings banks have been established in the majority of State schools. In New South Wales there are 862 such banks. Last year nearly £59,000 was deposited, but it must be confessed that the withdrawals were only £4,000 less! Although this does not indicate that the Australian youngster is a paragon of thrift the mere operation of a Savings Bank account familiarises the youthful financiers with the elementary principles of the banking system.

Parents are obliged to keep their children at school until they are fourteen years of age, or receive a certificate of competency in primary education, whichever first happens. The States provide free secondary education at high schools, of which there are a large number. Entrance to these is obtained by securing a qualification certificate, and instruction to enable the student to embark upon a university career is then imparted.

The high schools attain a very high standard of efficiency. Unlike private secondary schools each boy (or girl) student is of necessity a worker. He has had to prove his mental capacity and adaptability before entrance, and a limited number of bursaries and scholarships are in prospect which will enable those who secure them to enter a university and qualify—without expense to the student—for a profession. There are also the Royal Naval and Royal Military Colleges, entrance to which is by means of competitive examinations. To be sure scholars from private schools have the same opportunities but more often than not they lack the same incentive. The lad at the private institution is usually the son of people who are more or less well-to-do, and even if he does not excel at his studies he can generally rely on his parents to give him a "start in life."

I do not wish to convey the impression that the

high school scholar is a bespectacled young prig with a mind for naught but books—quite the contrary. The high schools recognise the value of sport, and a proper amount of time is devoted to cricket, football and other games.

Every town with any pretensions to importance has at least one private educational institution, but it must be registered. The curriculum needs to conform to the requirements of the State Educational Authority. The private school is subject to inspection, and the scholars to examination. It is to be pointed out that if a school be not registered attendance thereat does not constitute education “within the meaning of the Act!”

Each State has its quota of great Public Schools modelled on those in England. They were denominational in foundation. In most of the States there is at least one each, associated with the Anglican, the Roman Catholic, the Presbyterian and the Wesleyan Churches. These Public Schools, some of which could not now be properly termed denominational, are splendid institutions, which are having a big influence in moulding the life of the people of the Commonwealth.

The Australian boy takes a great pride in his *Alma Mater*. In after years he thinks back not so much to his college as to his school. He will tell you that he is an old Melbournian (Church of England Grammar School)—or maybe an old Xavierian (Xavier). He may not mention what his college was in his university. The old boys of each Public School have their associations and clubs. They all take the keenest interest in the “present boys” sports. The Public School eight-oar boat races for Head of the River at Melbourne and at Sydney are events of the year, while the inter-collegiate or inter-varsity races create no more than passing interest.

The wildest excitement prevails on Head of the River Day. Business houses, chambers and surgeries are deserted—all make for the River. If the same percentage of the London population turned out to see Oxford and Cambridge row about two million

would view the race.

With inter-Public School cricket and football, and at the annual combined athletic sports, the same enthusiasm prevails on a smaller scale. It is noteworthy that of the Australian Public School boys who go up to Oxford and Cambridge an unusually large percentage get their blues in the various sports. The same prefect system as in England is in vogue in the Commonwealth and the larger schools there have their Houses as in the Homeland.

We are very proud of our Public Schools in Australia and I think justifiably so.

Each State has its university within which most of the denominations have colleges. There are hostels for women students. But, in view of the fact that most of the undergraduates "live out," there is rather an absence of the spirit which so marks universities where the majority—if not all—students live in college.

On the academic side the universities of the Commonwealth—especially in Melbourne and Sydney—maintain a very high standard of efficiency; this is especially the case in regard to the faculties of medicine and law, the undergraduates in which have a difficult row to hoe.

Reference has already been made to the Royal Naval and Military Colleges. The former is fashioned on Dartmouth and the latter on West Point (U.S.A.)—on the advice of Lord Kitchener—but with an eye to Sandhurst. Entrance can be achieved only by competition. Physical as well as mental calibre, and personality, are carefully appraised in selecting from candidates. Fortunate is the boy who gains admission. The course extends over four years and his career is assured. Everything is provided—housing, clothing, and even pocket money. The Royal Naval College is at Jervis Bay and the Royal Military College at Duntroon, both in the Federal Capital Territory—remote from town life. During the War the graduates from both colleges did admirable work which spoke volumes for the efficiency of the training they had received.

Great attention is paid throughout the Commonwealth to agricultural education. There are numerous

training farms and agricultural Colleges. That at Hawkesbury in New South Wales has a world-wide reputation. There are students there whose homes are in Africa, North and South America, and in the East. The full course is for four years, but the student who is not striving for a diploma may engage on shorter courses from six months upwards. All manner of practical work is carried out, and the theoretical subjects embrace, among others, botany, agricultural chemistry, and veterinary science. General education also is imparted. The full course involves quite as much strenuous work as has to be done by those under many university faculties.

There are well staffed and equipped technical schools in all large towns. In some States periods of apprenticeship can be shortened if courses are taken in the schools.

The Australian youth has a wealth of ambition. On all sides he sees men in high places who have only their own abilities to thank for their advancement; their own abilities that is, plus an approximation of equality of opportunity. Primary education seeks out the pupil's natural bent and seeks also to instil in him a determination to develop it to his own and to his country's advantage.

There is a strong professional class in all cities, and any graduate, though he possess no influence whatever, has unrestricted opportunities to reach the head of any of the professions.

MEDICINE. Hospital appointments do not go by favour. The appointee must possess high academic attainments, and the best appointments go to the best men. It may be of interest to mention that the fees charged are never less than half a guinea and that they range up to three guineas for specialists. There are ample opportunities for the doctor who is prepared to go to the bush towns outback, though the cities and suburbs are well supplied with practitioners. There are numerous Friendly Societies, and an appointment under any of these assures a doctor of a moderate income.

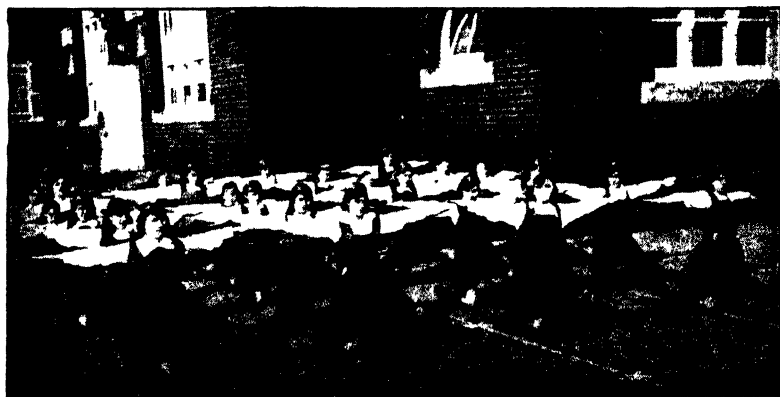
LAW. The organisation of the legal profession and



State (tree) school boys



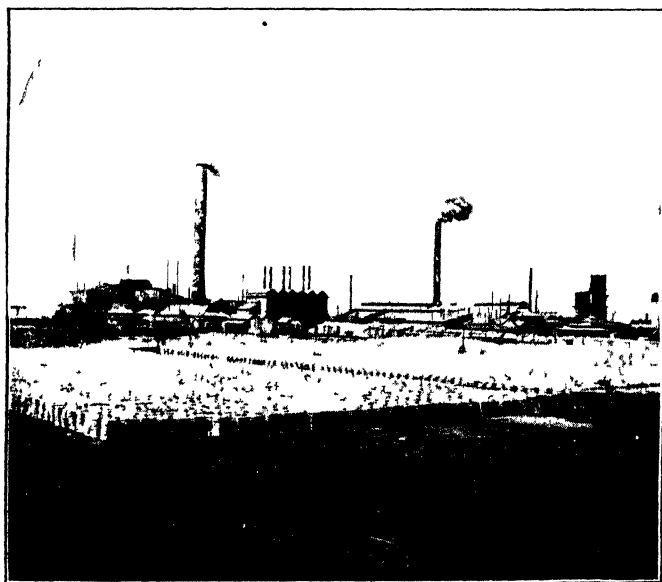
A technical school



State (tree) school girls



Farmers wives An expert is giving a lesson in pruning a pear tree



The Electrolytic Zinc Works (Tasmania)

the general scheme of the Judiciary correspond to the English system. Statute and Procedural law, however, often provide wide differences. In particular, too, some States recognise no distinction between barristers and solicitors, but even here professional etiquette and their different functions provide the barrier that is theoretically non-existent. A person practising in both capacities is known as an "amalgam."

Any barrister of ability and integrity may rise to the Bench. It is traditional and true that members of the senior Bar give every encouragement to the junior who, if he is keen and energetic, has—as a rule—not long to wait for his chance.

ENGINEERING. Of late years the Australian engineering graduate has been afforded more opportunity for advancement than during earlier decades when there were comparatively few enterprises afoot demanding engineering skill. Nowadays millions of pounds are being expended on constructional works which require much professional control.

Chapter XXII. Amazing Mineral Resources.

GOLD. The discovery of gold in Australia resulted in the attention of all the adventurous spirits of the world being focussed on the Island Continent. Small deposits of the precious metal had been found from time to time, but not sufficient to excite more than passing interest, until Hammond Hargraves made his world-famous discovery on the Macquarie River, in New South Wales, in 1851. Within the space of five years rich deposits were found in other districts, and still richer discoveries were made in the sister colony of Victoria. All the earlier finds were what is termed alluvial gold, close to the surface.

With the gold fever raging throughout the land, every man, woman and child was a prospector. News of each rich discovery flashed through the country, and inspired the unsuccessful searchers. Little was heard of failures, for people wanted to hear of *successes*, and these were exaggerated to suit the mood of the moment. Fabulous stories of fortunes won with a minimum of effort circulated throughout the world. Shipping

doubled, trebled and quadrupled, as hundreds of thousands of adventurous men flocked to the country from all quarters of the globe. Every conceivable class was represented. Nobles and aristocrats rubbed shoulders in a common purpose with men of the professions, artisans, labourers and ex-convicts. Social distinctions vanished, and their place was taken by a camaraderie begotten of hardships and privations shared, and of mutual endeavour—although actually it was a case of every man for himself. As in a great military enterprise, men of all sorts and conditions were herded together; but there were no officers. Luck might come the way of the common labourer, and the duke's son not discover an ounce of the precious metal.

But wealth, won easily, too often went as easily. Many a digger in sportive mood, with the flush of success and rum upon him, lighted his pipe with a ten pound note, and a few months later was penniless. One, who had his own ideas about swank, had his horse shod with gold. A group of fifty engaged the whole of the Theatre Royal at Melbourne, for a performance, in the sixties.

That sort of idiocy apart, few could remain cautious in such an atmosphere. The whole enterprise was one magnificent gamble, in which the stakes on occasions were men's lives. If a party set off into the bush and was not heard of, it was but an incident. Maybe the members had altered their plans and gone elsewhere; perhaps they had perished, or been murdered by blacks; they were soon forgotten, that is *on the diggings*. But if they made a big find, every man on the field heard of it, and—taking fresh heart—tramped in the wake of the fortunate prospectors.

Some of the successful diggers, having made their fortunes, set out for Home, and of these not a few—despite their wealth—found it necessary to work their passages, for many of the ship's crews as they arrived in the land of El Dorado deserted, and made for the gold fields.

The glittering stories of the successes of individuals who returned to England were broadcast in the manner of the day. The "listeners in" were

many and varied. The peer's son, disheartened mayhap by debts, heard of the fortune so easily won by the yokel from the village. His imagination was fired by pictures of re-established estate and fortune, and he took passage under cloak of anonymity. His real identity was perhaps disclosed months or years later, when, with the pallor of death upon him, parched with thirst or fever, he sent a final message to his folks at Home—through the mouth perhaps of a sometime convict or a person of lowly birth whose real mateship and manhood the aristocrat had learned to appreciate in the stress and turmoil of the diggings.

Sometimes his dream came true, and he returned to his Homeland with fortune established, a better man for his strange and intimate association with red-blooded humanity, shorn of all social trappings, where worth, not birth, was merit.

Though every race was represented on the gold fields, the overwhelming majority was British. Broken or "pidgin" English, or the American drawl, was often heard, but seldom a foreign language. The diggers were a law unto themselves. To be sure, there was a strong civil administration with police, but had the men not been well dispositioned, twenty times the number of police would have been required to maintain order.

They were hard fighters, were the big-hearted diggers; hard workers, hard drinkers and gamblers; optimists, one and all, fitting progenitors of the men who—with their fellow Empire defenders the gallant New Zealanders—on the Immortal Dawn of 25th April, 1915, on the rugged slopes of Gallipoli, wrote the name of Anzac, in indelible letters, across the world's scroll of fame.*

But the fields whereon surface gold was discovered were comparatively soon worked out. Elaborate plant had to be installed to explore and work the reefs far below. These necessitated considerable outlay of capital, and the independent prospectors for the most part became hired miners working for companies

From *The Romantic Story of Australia*, by L. St. Clare Grondona, published by Messrs. John Marlowe, Savage & Company, 161, New Bond Street.

whose shareholders lived in the capital cities, or overseas.

There are still thousands of men who prospect in the far bush—fossickers, as they are called—hoping to discover another Ballarat, Bendigo or Coolgardie.

The early romance of Australia is so intimately associated with the gold fields that but few people in Great Britain have any conception of the other types of mineral wealth which are found in the Commonwealth, the value and extent of which cannot yet be regarded as even approximately ascertained—as large areas of country yet await systematic prospecting.

SILVER AND LEAD. The story of the discovery and early vicissitudes of the world's greatest silver and lead mine at Broken Hill has formed the subject of a fascinating book by Roy Bridges.*

Mr. Bridges tells how, on the morning of the 5th September, 1883, Charles Rasp, a boundary rider on Mount Gipps' station in the far west of New South Wales, rode over the saltbush plains to a queer-shaped, desolate ridge, rising a couple of hundred feet above the surrounding level and known as Broken Hill.

Rasp had a booklet entitled *The Prospector's Guide* in his pocket. He had purchased it when on a trip to Melbourne. He was no metallurgist, was Rasp, but he had common-sense, acumen—and a hammer. He broke pieces off the outcrops of rocks. He studied the guide which had been his inspiration.

Returning to the station homestead he took the manager into his confidence and within a few days a syndicate was formed with the manager—Mr. McCulloch—as chairman, and six of the station employees as members. That was the genesis of the Broken Hill Proprietary.

The members of the original syndicate were Charles Rasp, boundary rider; George McCulloch, manager of Mount Gipps station; George Urquhart, sheep overseer; Philip Charley, jackeroo; David James, contractor and owner of bullock teams, and James Pool, his mate.

*From *From Silver to Steel—The Romance of the Broken Hill Proprietary*, by Roy Bridges, published by George Robertson & Co., Melbourne.

The Hill was visited and, with the assistance of *The Prospector's Guide*—as understood by Rasp—each man pegged out a claim. The party made few mistakes.

The claims were registered at the nearest Warden's Court. But the members of the syndicate—with the exception of Mr. McCulloch, who was by no means a capitalist—were wage earners, and the group had little cash at its disposal. So far only *indications* of hidden wealth had been revealed, and much costly work had to be done in the way of investigation, and to satisfy the law; for when a claim is pegged out it must be worked—or forfeited. During the first few months of the syndicate's existence many disappointments were experienced. The members found it exceedingly difficult to provide the necessary working expenses. Several of the original shares changed hands, but Rasp, Charley and McCulloch were among those who did not lose faith.

One day an English visitor named Cox came to the Homestead. He was thought to have money, and it was shrewdly suspected that he wanted a share in Broken Hill.

And the syndicate was sorely pressed for funds.

Not all the eloquence that the manager at Mount Gipps could conjure up was sufficient to convince Cox that a fourteenth share was worth £200.

"If you're keen on selling, Mr. McCulloch," the Englishman drawled, "I'll give you a hundred."

"Who's saying I'm *keen* to sell?" demanded the manager.

"My dear sir," Cox answered, "*aren't* you? I understood you'd be glad to get the whole Hill off your hands; but I don't want the whole of it; I'm offering £100 for a fourteenth share."

"If you don't happen to have the £200 I might split the difference," said the manager, with an air of sacrifice.

At length Cox offered £120. The manager vowed that he would see him further. Each estimated the other—McCulloch realising that the new chum wanted to buy; Cox that the manager wanted to sell. It was

a deadlock.

"Let us take a sporting chance," grinned the Englishman, "I'll play you for it."

"Play me what?"

"Cards—any game you like; the winner to get the share—or his price!"

The manager paused—weighing the proposal—balancing the chances.

"I'll play you!—Euchre," he replied. "If I win you'll hand over two hundred. If I don't you can have the share for one hundred and twenty."

"Done!"

It was the game of cards for the record stake in history. On those few hands of euchre, out of McCulloch's possession passed—for the price of £120—a share in Broken Hill, which, held in its entirety, would have represented in six years' time—if its market value was taken into account and dividends and bonuses added—£1,250,000.

It was not until nearly two years after the original claims had been pegged out that Rasp's judgment was vindicated.

A series of interesting events led to the establishment of the Proprietary, and to the proper exploitation of Broken Hill, commencing in 1885. During the three years following the discovery of chlorides and the flotation of the Proprietary the mine produced seven million ounces of silver and 28,000 tons of lead; and gave net returns exceeding £1,500,000 providing dividends of £568,000.

There are now many mines operating at Broken Hill, though unfortunately the field has been the scene of many industrial troubles of recent years. To-day iron buildings encase the plants evolved in progress from primitive windlasses to the vastest mechanism assembled about any Australian mining field. The output of silver, lead and kindred metals to date from the Broken Hill field exceeds £108,000,000 in value.

IRON AND STEEL. In 1911 the Broken Hill Proprietary decided to extend its operations to the manufacture of steel—a decision fraught with immense importance to the destinies of the Commonwealth.

The company had acquired well-nigh illimitable deposits of iron ore at Iron Knob, thirty-four miles inland from the coast in South Australia. Smelters were established at Port Pirie in Spencers Gulf in that State. The absence of coal in sufficient quantities in South Australia necessitated the establishment of the steel works at Newcastle, in New South Wales. The iron ore is shipped from Port Pirie to what is the greatest coal port south of the equator.

Of limestone and sandstone, which are important ingredients in the manufacture of steel, the company owns extensive deposits at Devonport—in Tasmania, and at Wondabyne—sixty five miles from Newcastle—respectively. There are many other deposits of both these materials in all states but those whence the Proprietary draws its supplies are found to be of the type best suited to turning out high class steel.

BY-PRODUCTS. In the making of coke for the blast furnaces the company produces numerous by-products, notably gas, tar, and benzol—which is sold in the Commonwealth as an All-Australian motor spirit. The output of benzol reaches a million gallons a year!

The outbreak of war, with inevitable dislocation of shipping, caused the people of the Commonwealth to be indeed grateful for the enterprise of the Broken Hill Proprietary. The works were opened by the then Governor General—now Viscount Novar—on 2nd June, 1915. Railways under construction and other enterprises requiring steel would have been in dire straits had construction been dependent on overseas supplies. The works at Newcastle were able to cater for all requirements; even for the completion of the transcontinental Railway from Port Augusta in South Australia to Fremantle in the West—a distance of over fourteen hundred miles.

In addition to supplying local needs, the company was able to execute orders from the British Government for thirty thousand tons of shell steel, steel rails and fishplates.

A description of the Broken Hill Proprietary's works at Newcastle would be most interesting, but

would differ in few respects from a description of similar works in the United Kingdom.

COAL. New South Wales has the most extensively developed coal-field in the Southern Hemisphere. It is estimated that nearly twenty thousand million tons is available for exploitation. Of that some fifty per cent. is of high grade. During 1922 the actual quantity mined exceeded ten million tons. Much of the coal outcrops at the surface; and the seams are then followed up by tunnelling. Where shafts have to be sunk they are usually lined with brick-work, or concrete, and they have a diameter of from eighteen to twenty-two feet. Two such shafts penetrate to a depth of two thousand nine hundred feet! The coal is broken from its seam by means of hand picks or machine-driven cutters. Explosives are used—unless the mine is known to be gassy or very dusty.

All the collieries are ventilated by means of electric fans which are worked continuously. The general equipment of a modern New South Wales colliery will be found to compare very favourably with that in use in any other coal-producing country.

Victoria is relatively poorly supplied with black coal. Although a government controlled mine operates at Wonthaggi, most of the needs of the State are supplied from New South Wales.

There is no active coal mining in South Australia at present, though there are considerable deposits of both the black and brown varieties and these will ultimately be exploited. In the meantime New South Wales caters for South Australian requirements.

Queensland is well served with coal deposits, but the maximum output to date has been in the vicinity of only a million tons per annum. However, the industry is capable of much expansion with the resources available.

Western Australia's coal is found chiefly in the Collie district, where large areas are being successfully mined. This coal, although of lower grade and higher moisture content than that of New South Wales, is largely used by the state railways and for government electric power plants, where special means are em-



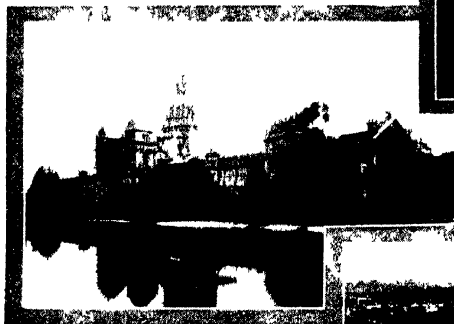
Near Ruthen Glen (Victoria)



Apple growing district (Tasmania)



Lands Department Sydney
New South Wales



Exhibition Buildings
Melbourne Victoria



Luncheon
Tasmania



Treasury Buildings
Brisbane Queensland



Government Buildings
Adelaide
South Australia



St George's Terrace,
Perth, Western Australia

ployed for its combustion. The output from the five collieries approximates a half a million tons a year. In Tasmania under a hundred thousand tons is mined annually though there are considerable fields awaiting development.

BROWN COAL. Victoria is noted for its brown coal, the exploitation of which, whilst having been urged for many decades, has commenced in a practical fashion only recently. The estimate of deposits reaches amazing figures, running into tens of thousands of millions of tons all of which is easily accessible. Brown coal occurs near the surface. When the layer of earth—called the overburden—has been removed the coal can be quarried in what is termed an open cut. It is very workable stuff and can be prized out by means of immense steam or electric shovels. Victorian brown coal is found in seams varying from one hundred and fifty to eight hundred feet in thickness!

Exploitation of this truly illimitable latent power is well under way at Yallorn in the valley of the Latrobe River, some eighty miles from Melbourne. Here is an immense field with only thirty feet of earth overburden. This has been cleared from a considerable area by the most modern mechanical means, under the control of the Victoria Electricity Commission.

It is interesting to record that the chairman of this Commission is Lieutenant-General Sir John Monash, G.C.M.G., K.C.B., who commanded the Australian Imperial Force in France. In addition to his many other academic attainments, Sir John Monash—who was born, and educated at the Scotch College and Melbourne University, in Victoria—is a civil engineer of international repute.

The construction of the works under his direction will be complete in a few months. The plant—which is adapted to considerable expansion—will initially develop 62,500 kilowatts per day, in addition to turning out 120,000 tons of brown coal briquettes per annum. The briquettes are of re-compressed pulverised coal. They are used both for domestic and commercial fuel. The result of the Electricity Commission's

enterprise is that nearly half the State of Victoria will be supplied with cheap power—carried by means of overhead cables which thread through the bush to all points of the compass.

It is difficult to describe further the ramifications of the mining industry and at the same time to avoid a maze of technicalities which would be out of place in this volume. The chief difficulty which confronts a writer who is himself very much a layman and who is endeavouring to interest the layman, is that an extraordinary variety of metals including copper, silver, gold, and many others may be extracted from one piece of ore. It must suffice to make but brief reference to production in general terms.

ZINC. This metal is used extensively in the arts and industries. It is employed in galvanizing iron and steel, in the production of alloys such as brass, bronze and the aluminium zinc alloys where lightness is essential, as for air-craft. It is also used in sheets for roofing and similar purposes. The fixation of indigo and other dyes is effected by the use of what is known as zinc dust or blue powder.

Zinc is found in conjunction with silver-lead and sulphur in various parts of Australia in very large quantities—notably at Broken Hill, at Mount Reid in the Rosebery district (Tasmania) and in Queensland.

At Broken Hill it is produced in the form of zinc concentrate, simultaneously with the production of lead concentrate, in large concentrating mills, which adopt both gravity and flotation principles for the separation of the galena (lead sulphide) from blende.

Prior to the War the Broken Hill companies produced approximately 400,000 tons per annum of zinc concentrate, all of which went to Germany and Belgium for the recovery of the zinc. A small quantity of these concentrates was smelted in Australia by the Belgium method of retort practice, involving the roasting of the zinc concentrates and the distillation of zinc therefrom.

During the War Broken Hill interests, comprising the Amalgamated Zinc Co., Zinc Corporation Ltd., the Broken Hill North and Broken Hill South Com-

panies, associated themselves together in developing the electrolytic zinc method for the production of electrolytic zinc from Broken Hill concentrates. This combination was successful in completely establishing what is to-day a very prosperous enterprise—The Electrolytic Zinc Co. of Australasia Ltd., with works at Risdon, Tasmania—a company which now is producing approximately 130 tons of electrolytic zinc daily.

In the production of electrolytic zinc the zinc concentrates are primarily roasted to convert the zinc into zinc oxide and sulphate, which are soluble in sulphuric acid.

Simultaneously the sulphur eliminated in the roasting process is converted into sulphuric acid, a portion of this sulphuric acid is utilized to dissolve the zinc from the roasted concentrate, but the greater portion of the sulphuric acid so produced is used for the manufacture of superphosphate. The zinc sulphate solution after being purified is electrolysed, resulting in the production of electrolytic zinc.

Indirectly this industry is of great benefit to Australia in-so-far as before the War sulphur had to be imported for the manufacture of artificial manure. Sulphuric acid required for this purpose to-day is largely obtained from the sulphur recovered in the process of manufacturing electrolytic zinc.

Interesting flow sheets showing the concentration and metallurgical practice by the Broken Hill Companies, the Broken Hill Associated Smelters, Port Pirie, the Electrolytic Zinc Co., Risden (Tasmania), The Electric Refining and Smelting Co., Kembla (New South Wales), and the Mount Morgan Gold Mining Co. of Queensland, were shown in the mining and mineral exhibits in the Australian Pavilion at the British Empire Exhibition.

COPPER. There has been extraordinary fluctuations in prices of copper during recent years, ranging from £60 to £120 and back to £60 per ton. The production of this metal has been influenced accordingly. Copper is mined in all States, notably in Tasmania, Queensland and South Australia. The last

named, if the entire period over which production has extended be considered, has easily out-stripped the others in copper production. But in recent years Tasmania and Queensland have shown considerable outputs. The exploitation of the Tasmanian ores has been in the hands of the Mount Lyell Mining and Railway Company Limited which to the end of 1921 had paid over £3,800,000 in dividends.

The value of the whole of the output of Australian copper to that date was £91 million. South Australia's outputs amounts to over £32 million, and Queensland's to over £24 million. Tasmania's exceed £16 million, and New South Wales' £15 million.

TIN has also been the subject of extraordinary fluctuations in prices, which have varied by about 100 per cent. during recent years. This metal is mined in all States, but New South Wales and Tasmania are the principal contributors. The value of the tin produced throughout the Island Continent to 1921 exceeded £40 millions.

Below is printed an extract from the Commonwealth Year Book showing the total estimated value of mineral productions throughout Australia to a recent date. From this will be seen that the Island Continent produces practically every known metal in greater or less quantities.

OIL SHALE. The exploitation of shale has been practically limited to New South Wales. In 1921 32,000 tons, valued at £77,000, was produced. Oil-bearing shales are common in all States, and high hopes are entertained that flowing oil will yet be discovered. The most promising indications have been found in Western Australia and the Northern Territory.

PRECIOUS STONES. About £150,000 worth of diamonds have been discovered in various parts of the Commonwealth, chiefly in Victoria and New South Wales.

Sapphires are found principally in Queensland and Tasmania, but the search for them does not represent a big industry.

Opal is found extensively, especially in New

South Wales, Queensland and the Northern Territory. The value of the output until recently was about £1,700,000.

CONSTRUCTIONAL STONE. The Commonwealth is well supplied with building and ornamental stone. Australian rocks possess most of the qualities of those found in other countries, and in some respects are superior. A great deal of modern machinery has been installed for quarrying, cutting and polishing. Marble now figures largely in the interior construction of all buildings having any architectural pretensions.

Sandstone is largely used, particularly in Sydney. It is very workable, but loses none of its durability on that account. In Melbourne, bluestone is more generally used. Many noble buildings adorn the streets of all the capital cities.

The needs of builders to date have been met after barely scratching the surface of supplies. The unquarried material represents vast wealth which in the fulness of time will give employment to tens of thousands of Australian workmen.

There is every reason to believe that more beautiful stone will yet be unearthed, as the ever increasing demand requires. The climate is such that no artificial measures need be resorted to for the preservation of stone or marble used in buildings.

Practically every colour is found in marbles. A beautiful black variety is quarried at Windellama in New South Wales—comparable with that which is found in Belgium—and Victorian (Buchan) marble is in the same class.

Red is a colour frequently found, and some fine brecciated types occur in New South Wales, where also a marble of an exquisite golden colour is quarried. White marble is not found as freely as those in colours.

Granites are plentiful, some of a rich red, others in various shades of grey. Most of the quarries and known deposits are within reasonable distance of the chief cities.

178 THE KANGAROO KEEPS ON TALKING.

MINERAL PRODUCTION—VALUE TO END OF 1921.

Minerals.	N.S.W.	Victoria.	Q'land	S. Aust.	W. Aust.	Tas	Nor. Ter. (a)	Australia.
	£	£	£	£	£	£	£	Million. £
Gold	68,261,172	301,481,488	84,159,079	1,608,488	147,771,481	8,821,826	2,274,174	609
Silver and lead	89,340,109	261,040	3,247,724	877,921	1,770,869	6,963,701	62,515	102
Copper	15,297,846	216,656	24,307,144	82,709,458	1,660,648	16,048,518	231,710	91
Iron	4,146,918	15,641	471,784	2,888,067	36,712	52,110		8
Tin	12,505,748	908,544	9,900,890		1,484,041	15,218,996	520,189	40
Wolfram	271,642	11,885	1,061,321	301	1,441	172,293	216,281	2
Zinc	13,727,456	..		15,993	5,437	36,320		14
Coal	114,946,008	5,802,061	10,452,990		3,081,874	1,075,719		135
Other	6,881,164	678,415	2,272,429	2,223,195	101,262	546,412	28,438	13
Total	820,367,718	309,320,562	135,873,961	39,823,413	155,913,254	48,935,895	8,333,307	1,014

(a) To 30th June, 1921

The "other" minerals in New South Wales include alunite, £195,587, antimony, £344,588, bismuth, £223,840, chrome, £113,425, diamonds, £142,184, limestone flux, £927,392, molybdenite, £214,007, opal, £1,511,204, scheelite, £192,375, and oil shale, £2,625,875. In the Victorian returns antimony ore was responsible for £555,055. The value for coal in this State includes £186,974 for brown coal. Included in "other" in the Queensland production were opal £180,195, gems, £502,126, bismuth, £308,749, molybdenite, £404,452, and limestone flux, £636,070. The chief items in South Australian "other" minerals were salt, £1,386,146, limestone flux, £226,632, gypsum, £199,172, and phosphate, £123,589. In the Tasmanian returns limestone flux was responsible for £91,739, and osmiridium for £242,426, while the figures for recent years include values for iron pyrites.

Chapter XXIII.

Forests and Flora.

Australia is noted for its timbers. In some of the coastal forests the tallest trees in the world are found. These giants are from two hundred and fifty to over three hundred feet in height, and their growth is such that the trunks are vertical and devoid of limbs for from fifty to eighty feet from the base. The vegetation in these forests is so dense that but few of the sun's rays penetrate to the ground. Thus it is that the young tree when springing up makes a vigorous upright growth to reach sunlight.

Practically all such timber is what is known as hard-wood, well adapted to structural works. It is not necessary here to enter into a discussion of the peculiar merits of the various types of euclypts and other trees which flourish. The greater portion of timber supplies are derived from the eucalyptus family. Some of the woods are more durable under water than when exposed to the air, and *vice versa*. The breaking strains vary under different circumstances, as do the timbers' capacity to resist white ants, and other enemies of wood.

It is an unfortunate fact that immense forests have been ruthlessly destroyed to make way for the agri-

culturist—forests that had a potential worth of tens of million sterling. But, at the time of their destruction, they were worthless to the farmer, who killed the trees by ring-barking, and burnt the forests out. Now a wiser order obtains and State departments exist whose functions are not only to conserve forest lands, but to plant large areas with suitable timbers.

It is in Western Australia that the wonderful jarra and karri forests are found. Jarra is largely used to provide paving blocks for London streets. It is one of the most durable and finest timbers known.

The leaves of the eucalyptus (or gum) trees on distillation yield the valuable medicinal oil of that name.

Once away from the coastal belts—excepting in certain localities—the trees are more scattered, in all States, and there are few of those dense forests which promote the growth of very tall straight timber. But the woods of many of the lesser trees have extraordinary durability and beauty.

There are few soft-woods, but of hard-woods there is a range and variety such as is found in no other country.

All Australia's trees are evergreen but the euclypts shed a layer of bark annually. It curls off in long rolls having the appearance of brown card-board. At the shedding season the trees seem to be in tatters from trunk to topmost branches. In a few weeks the bark drops until the ground is covered with thousands of quaint-looking cylinders that crunch crisply under foot. The limbs with their new bark glisten white as though enamelled, and in due course turn a light green, and finally, brown.

There are many pines—notably in the Murray river districts—the timbers from which are so saturated with turpentine that they are quite white-ant and borer proof. Acacias and wattles—the bark from which yields quite the best known tanning agent—are widely distributed in great variety.

In north-eastern and central Australia the trees most met with are gidyeas and borees. These do not grow to a great height, and the foliage consists of

hard, grey-green, very pointed leaves, which individually offer but little shelter, though some varieties of gidgees have very dense foliage in compensation.

The silky oak, emu apple, and kurrajong are very beautiful trees, the first-named yielding prettily grained, workable wood. Those interested in timber would be well advised to secure from Australia House a pamphlet which deals exhaustively with the subject. Several of the types would be of especial value to cabinet makers, many of whom must surely have been interested in the exquisite examples of woodwork in an extraordinary range of natural colours at the Australian Pavilion at Wembley.

There are numerous varieties of ferns in the Commonwealth, ranging from the dainty "maiden-hair" to giant tree ferns whose regal arrays of curling fronds are up to fifty feet from the ground in the dense forests and mountainous ravines, though elsewhere they are usually about ten feet in height.

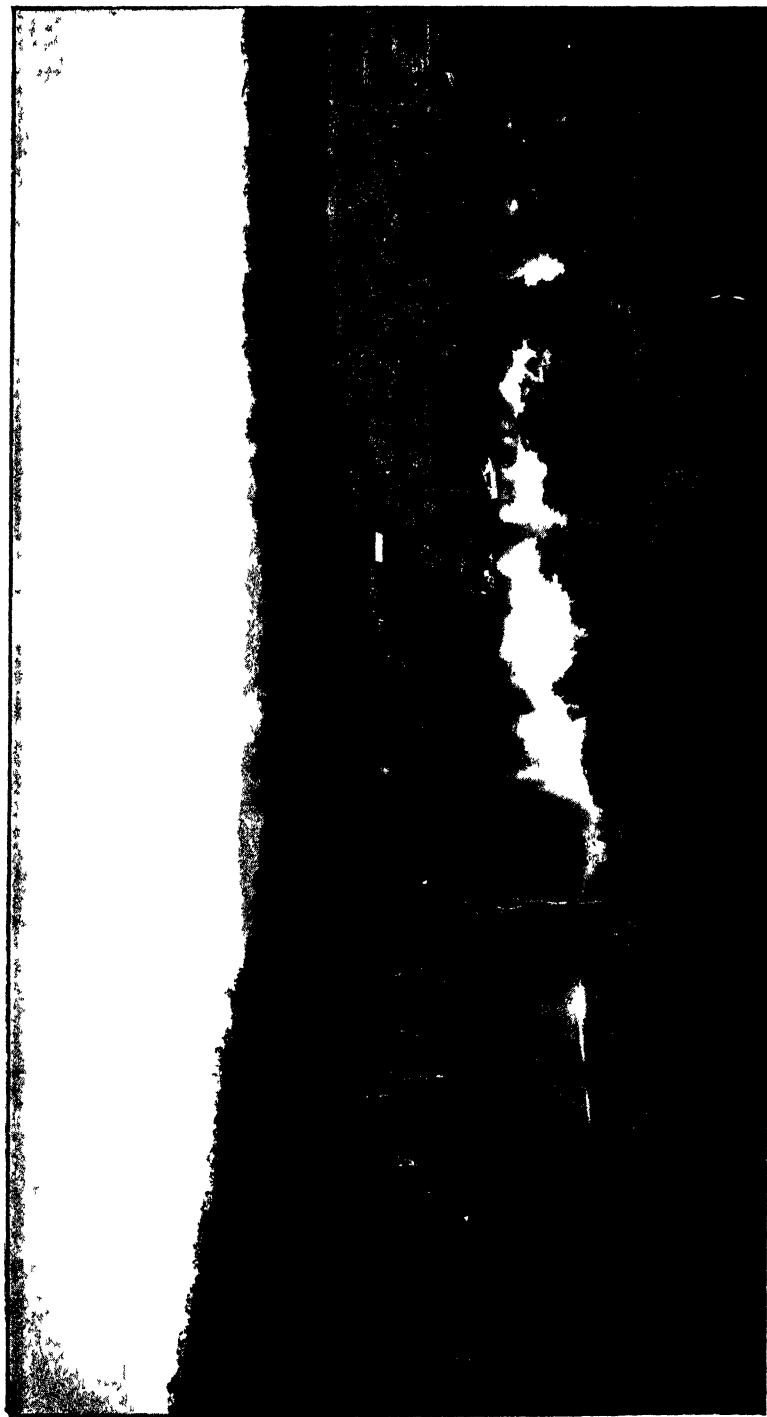
Of palms there are many kinds in all the tropical and sub-tropical coastal areas. One beautiful example, the Illawarra palm, is common in the southern districts of New South Wales.

The natural grasses, as I have said elsewhere, are supplemented by a selection from all parts of the world. Many of the introduced varieties are so common and well distributed that I am not sure as to whether some of the grasses are indigenous or not.

However, of those which I know to be natural in the country, Mitchell and Flinders grasses are perhaps the most valuable in the north. Both are excellent fodder. Perhaps the most extraordinary grass is spinifex, which, as its name connotes, is spiny. It grows over vast areas in the interior in mounds several feet high. It is evergreen, and when in seed stands over six feet in height, in a good season. The ears make excellent feed, especially for horses. This grass is very inflammable and burns vigorously at any season of the year. The new growth springing up after a fire makes good grazing for cattle, but unless it is frequently burnt off it becomes too coarse for fodder, excepting—as I have mentioned—the ears when in seed.



Such trees grow nowhere else in the world. The camera's limitations are regretted.



Virgin Forest in contrast with cultivation—Queensland

Contrary to a popular English belief there are many sweet-scented and exquisite flowers in the bush. The wattle, a gorgeous yellow, and the waratah, a flaming red, have pride of place. It would be difficult to describe Australia's flora in any sort of detail without the assistance of coloured plates which I have not at my disposal.

Roses, and other English flowers of all varieties, thrive to perfection in gardens. Briars, midnight primroses, poppies and other British field flowers grow wild in districts to which they have been introduced—to such an extent as to be a considerable nuisance. I often marvelled that any Celt should have been so proud of the Scotch thistle that he imported the seed. It is now a pest of no small order in parts of Victoria and New South Wales.

But the horticultural blunderer who introduced prickly pear to Queensland is the one on whose head rests most abuse. This insidious growth has taken possession of hundreds of thousands of acres. The man who can devise means of economically eradicating it will receive a reward from the government of (I think) £5,000.

Chapter XXIV. Society—Clubs—Home Life.

THE AUSTRALIAN TYPE. "During the war the sight of Anzac soldiers, sun-baked giants, mingling a fierce resoluteness with a naive gentleness in disposition, strolling through the streets of London prompted English people to ask for some explanation of the Australian type. One apothegm seemed true and apt: *The Australians are the young of the British*. Probably that is the dominating characteristic of the Australian. It gives him his youthful outlook on the problems of Empire, his directness, his impatience of compromise, his rather old-fashioned pride of race."*

The progenitors of the Australians of to-day—men and women—were of an adventurous type. The very small quota of convicts apart—even they were outnumbered three-fold by their guards and the members of the civil administration, nearly all of whom settled in Australia—all the early settlers left their domestic

*Mr Frank Fox, writing in *The Spectator*.

hearths in the British Isles because they were red-blooded adventurers in search of greater opportunities that might lead to fortune.

The aborigines, who were of too low a class—mentally and physically—to have any influence whatever on the new people, vanished as settlement advanced.

The newcomers were free from the more arbitrary of conventional and social restrictions, some of which were—to say the least of it—irksome, in the United Kingdom a hundred years ago. Conditions in the new continent offered the nearest approach to equality of human opportunity that has ever favoured any community. The clear skies, the equable climate, the open spaces, the freedom, all conduced—and conduce—to physical and mental expansion, always with that proper restraint begotten of racial tradition and ideals which are reflected in the religious, domestic, social, and the national lives of the people of the Commonwealth to-day.

THE AUSTRALIAN IN LONDON. It seems desirable that a proper conception of the social life of the Australian should be conveyed to some English folks. The ideas possessed by people who live in the Homeland concerning the citizens of the Commonwealth are exceedingly diverse and often inaccurate. Such ideas are often based on lack of information or on impressions gained by a superficial acquaintance with, or casual observation of, people from the Antipodes who visit England.

There is a type of dominion visitor who cannot enter a shop without announcing to the salesman that he is from some far flung outpost of Empire! Perhaps it is that London rather overwhelms him, and he feels forced to make some bid to attract a measure of attention to himself. Perhaps it is nervousness or just awkwardness, but it is too often regarded in England as aggressiveness. Shyness might be better understood. But there is another type, the members of which are not assertive, nor are they shy, nor do they talk about themselves.

An Australian friend of mine was recently a guest

at a dinner party in Mayfair. He had been in England for about six months. Beside him was a very engaging young woman and conversation did not ebb. My friend had been to most of the theatres and cabarets, the opera, and the various important sporting functions. He had many relatives in England—whom he had met for the first time when on leave from France in 1916. They had been glad to re-welcome him in 1924 and he had participated in many of the social events of the season.

I mention these minor details to shew how he was able to take part easily in the small talk of a private dinner party. I mention them also to shew that if a visitor to London has not done these things he *may* find conversation, with those who have, rather difficult.

Talk turned to the British Empire Exhibition, *apropos* which the engaging little lady remarked, "Of course, London is full of colonials—and how impossible they are."

"I am afraid they are rather dreadful," smilingly replied my friend; and the conversation turned into another channel.

A little later the hostess's casual remark to another guest—"Ask Mr. So-and-So, he is an Australian and may be able to tell you," caused a mild sensation at one section of the table.

And it so happens that the young woman who had such decided views in general on Australians and other Britishers from overseas has since done her best to make amends by becoming engaged to my friend.

And as far as I am able to observe they are both very fortunate.

Of course, as an Australian, I cannot be dogmatic, but I feel that most English people of culture would find that the percentage of equally cultured folk in Australia to the whole population to be at least nearly as high as in the United Kingdom, though of course, the settled social life of the English counties has no counterpart elsewhere in the world.

Quite a number of English people know much about those who live in the Antipodes; but there are tens

of thousands whose impressions are vague—and often wrong. I would remind those of the latter group who chance to read this book that an Australian is sometimes rather out of his element in England if he be a stranger among people with the incidents of whose daily lives and with whose small talk and catch phrases he is quite unfamiliar.

But the Australian of few social pretensions in his own land is soon made to feel at home with folk in Great Britain—especially in Scotland—who possess a similar social outlook. Conversational restrictions—to the point of fetish—do not here obtain, and he finds that his friends in the United Kingdom have a genuine and uncurbed interest in him and the country whence he comes. That he monopolises attention for the time being is not imputed to him as a reproach.

And he enjoys himself!

The pity of it is that so many dominion and colonial visitors see practically nothing of home life in this country. They live in hotels, see sights, and go back to their countries without having had that personal contact which would have been so mutually instructive and advantageous.

SOCIETY IN AUSTRALIA. Each State has its Vice-Regal representative, and at Melbourne—for the time being the Federal Capital—both the Governor-General and the State Governor reside. A considerable amount of entertaining is done at all Government Houses.

There are excellent clubs in all the capital cities and larger provincial towns. The English visitor to the Union (Sydney), or to the Melbourne Club, has no reason to feel that he is away from the West End. But although membership of either the Union or the Melbourne is restricted to the leaders of the professions and leisured classes, there are dozens of other similar institutions both for men and for women where the traditions of English club life are carried on. In addition to the purely social, there are university, naval and military, civil service, commercial, political and trade clubs in all capitals; and there are hundreds which cater for artisans and labourers.

The Australian Jockey, Victorian Racing, the

Royal Yacht, and the Royal Golf Clubs are considerable social institutions; all have fine premises, and many are residential. And these are only the leading ones of their particular kind, of which there are many.

In the country districts the social leaders are certain of the squatters—many of whom are university men—and other landed proprietors, some of the bankers and the representatives of the professions. There are always golf, tennis, picnic race (amateur), and sometimes polo clubs; and for more general membership cricket, football, ordinary racing.

In a country district having five thousand inhabitants there are an astonishing number of social grades, the boundaries of which are veritable ramparts that defy the climber far more successfully than in the large cities.

But even in the State capitals every one, more or less, knows everyone else in his own set, and the sets are legion.

People are not nearly so hail-fellow-well-met in Australia as is generally supposed. I am not venturing to criticise the social systems, which are common to British peoples in all parts of the world. I am merely trying to indicate that whatever be the social standing of the visitor or new settler he will generally find people of his own outlook and class ready to welcome him. But I may venture to express the opinion that however unfavourably one may regard sets in theory, they serve a very useful purpose in practice, for the average man likes to feel that those with whom he associates are his peers, neither too far below, nor too far above him, in culture or social outlook.

AMUSEMENTS. There is little to choose between the Australian and the London theatres. The dressing and scenery in some English shows are more extravagant, but that is the exception rather than the rule. There are of course few first-class theatres in the Commonwealth as compared with London. Melbourne and Sydney have about six in each, and the other capital cities three or four. But the personnel acting, in addition to being the best that Australia can produce, embraces a selection of the most noted English

and American artists. There is not the same range of prices for seats as in London, the best are a little cheaper and the worst rather dearer than in England. As to the concert platform, all the foremost artists (and artistes) of the world visit the Commonwealth, and the incomparable Melba is seldom long away from her native land. But grand opera is a too occasional treat. In Sydney there is a magnificent State orchestra; choral and musical societies abound. The cinema theatres in the large cities are veritable palaces, as elsewhere in the world, and the smallest country town has its regular "pictures."

Dancing is exceedingly popular. There are numerous cabarets in the larger cities; one recently established in Sydney is quite a palatial place. Many compare quite favourably with those in England.

HOME LIFE. May I reiterate that ninety-eight per cent. of the people are of British parentage and, as home life is in the United Kingdom, so is it in the Commonwealth, with this difference, that members of a family go out more in Australia than in Great Britain. The year-round genial climate is the chief factor which permits of so much more time being spent away from the family hearth. Another reason is that the members of an average household have more money to spend on education and amusements than is the case in the United Kingdom. But these are details. Domestic ideals, founded on a common Christian morality, are on the same plane in the All-British Continent as in the Homeland of its people—or their progenitors.

DOMESTIC HELP. There are about ninety thousand unhappy men in Australia who are doomed to hopeless bachelordom unless the matter is adjusted by an influx to the Commonwealth of members of the opposite sex. Generally speaking, it may be said that the lady who is a spinster in Australia is so by choice. Is it any wonder, therefore, that there is a dearth of domestic help? The maid who arrives from the United Kingdom is soon the possessor of a number of admirers. Maybe a superior sister wrote in the maid's autograph book before her departure for the Antipodes: "Be not coy, and while you may, go marry," and so on.

And the maid very often accepts this excellent advice.

But a considerable number of women-folk seem to prefer single blessedness, so the domestic problem is not quite such a problem as it might appear. The mistress who realises that three-quarters of a loaf is better than no bread contrives to keep her servants. Generally speaking, they are permitted to go out when their work is finished, and they are given more free time than in England. Under such auspices maids may be relied upon to serve their mistresses long and well. In the country, the domestic help difficulty is best over-come by the employment of married couples.

There is a plethora of lady helps available but most people prefer a straight-out servant.

COST OF LIVING. All essential food stuffs are very much cheaper in the Commonwealth than in England. I refer to such commodities as bread, meat, milk, butter and jams. House rents are difficult to compare but I am of the opinion that, generally speaking, they are lower in Australia. Clothes are dearer in the Commonwealth but one does not need a great deal of heavy—and therefore expensive—clothing. Children may safely wear—and perhaps be more healthily clad in—sandals without stockings for about eight months of the year in any part of Australia, and in the tropics sandals suffice practically all the year round. This will give an indication as to the economies which may be safely effected in other directions.

Cost of living in any country is always a matter of argument—index figures notwithstanding. But I believe that the average person can live at least in a corresponding way from ten to twenty per cent. cheaper in Australia than in London. I may be wrong but, before arriving at that conclusion, I have been more than a nuisance in enquiring from my house-keeping friends in both countries.

I am quite certain—without making comparisons—that of people whose incomes range from £180 to £1,000 a year and who desire to bring up a family, those who live in Australia are very happily placed; and the difficulty as to what is to be done with

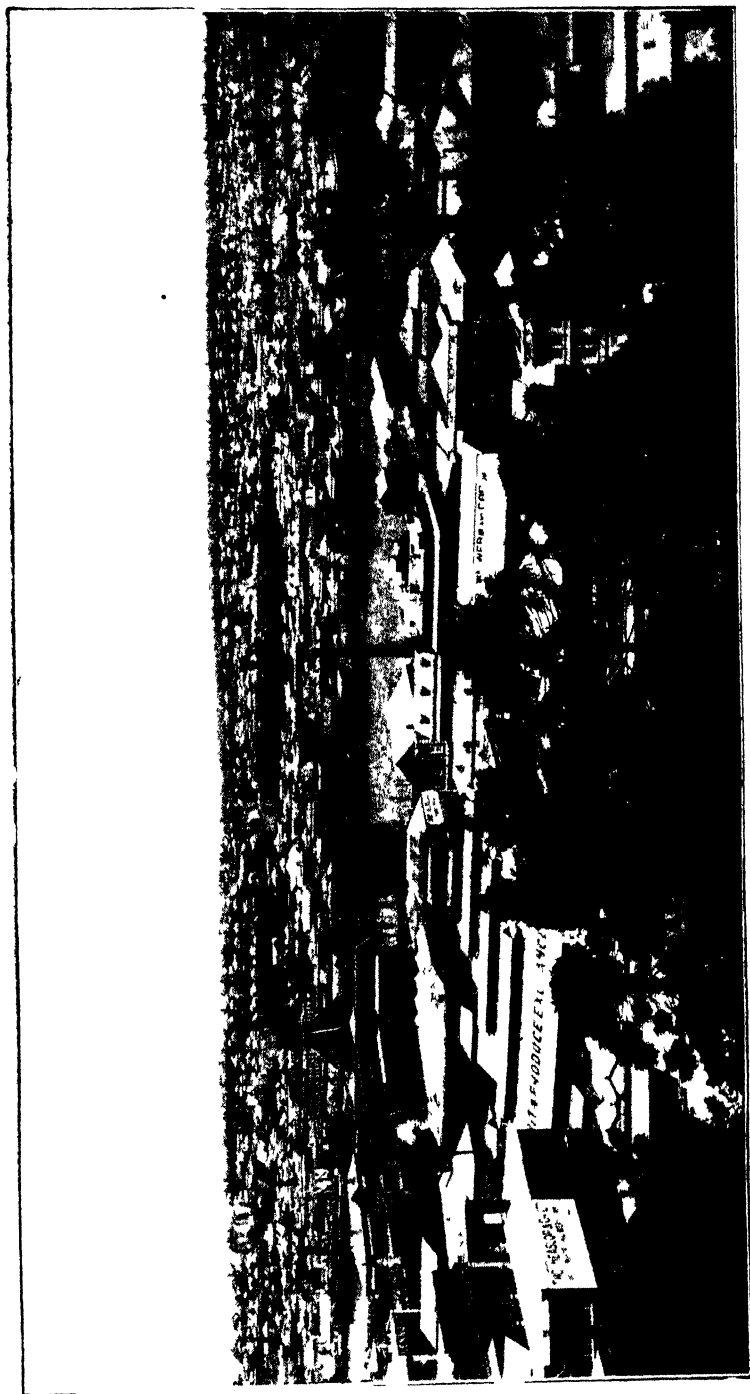
children when they grow up is *no* difficulty in the Commonwealth.

TYPES OF BUILDINGS. The cities are quite justly renowned for their fine official, institutional, and commercial buildings. There are municipal laws governing the erection of residences as well as shops, offices and factories. All plans must be approved by official architects. The land on which a residence is built must have a prescribed frontage and depth.

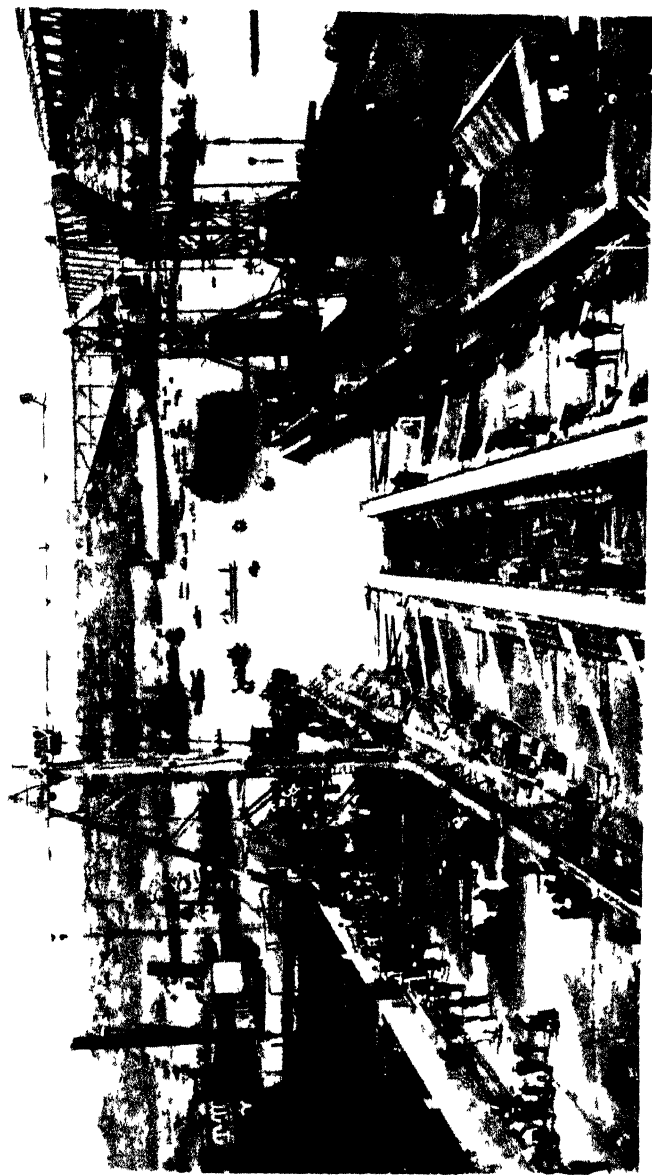
The most modern methods of town planning are adapted to the new suburbs which are springing up at a great rate especially around Melbourne and Sydney. The former city offers fast electric train services which permit of workers living at distances up to twenty miles from their offices or factories. It is a noteworthy fact that in Melbourne the number of tickets issued as from a congested district about two miles from the centre of the city, has fallen off by seventy-five per cent. during the past ten years, whereas the number issued at a new suburb nine miles further out, on the same line, has increased twenty-fold. In order to encourage people to go further afield into more healthy and congenial surroundings—and incidentally to where land is much cheaper—the railway department has at times offered considerable concessions in fares for periods of six months and upwards.

At Sydney, transport is not so good as at the Victorian capital, but, as mentioned in an earlier chapter, it bids fair soon to improve with the electrification of railways and the construction of a bridge across the harbour.

In all States private and governmental organisations offer facilities for workers acquiring their own homes on a rent purchase system. The fact that the *State is a competitor* in these enterprises ensures that the terms offered by private firms are reasonable. Thus it is that many people who paid excessive rentals in congested areas a few years ago now own their own modern houses on large blocks of land in congenial localities; and they have usually achieved this with less expenditure than they would have incurred had they remained in a congested suburb.



A View of Brisbane, Queensland



The launching of H M A S Adelaide, Cockatoo Dock (Sydney Harbour)

Although the State has done much, I think that to private enterprise—acting in concert with the State Railway Commissioners and Municipal Tramway Board—most credit is due.

The type of suburban house generally favoured is the red tiled or slate roofed bungalow or villa, such as may be seen in the newer portions of London suburbs; but the Australian houses are usually single storied, and have larger rooms than in England. All have verandahs and more window space than is the case in Great Britain. For the most part they are constructed of brick or concrete, though the native hardwoods make excellent and durable dwellings which are more often met with in the outer districts. The most distant suburbs are seweraged and are served with electric light, telephones, and such conveniences.

In the country, although the red tiled or slate roofed brick bungalow is sometimes seen, the general order is to build of hardwood with a corrugated galvanised iron roof. There are always very wide verandahs. The roofs and houses are painted white, red, or green, and such homes are very commodious. In all country houses having any pretensions, telephones and some system of gas or electric lighting is installed, as is sewerage which is disposed of through septic tanks.

I do not wish to convey the impression that anything approaching the majority of farmers have such comforts but, for the man who works his property in an efficient manner those amenities are soon within reach.

But at the outset unless he has capital—over and above what is required towards a rapid development to the productive stage of his property—the man on the land lives in the crudest of dwellings. The walls are of rough timber, the crevices being plastered with mud; the roof, sheets of bark or galvanised iron; the floor, *terra firma*; bed, furniture and household utensils just what the settler's ingenuity can devise out of packing cases, sacking and—that priceless boon to all rural pioneers—the kerosene (or petrol) tin.

The man who takes up land under any of the

numerous state settlement schemes can secure a substantial cash advance from the lands' department. A portion of this is permitted to be expended on a quite comfortable house at the outset; but such money has to be repaid, and the sensible man prefers to invest it in a reproductive direction; that is in developing his property. And he defers the erection of a modern dwelling until he is able to pay for it himself.

Some of the more prosperous station-owners live in veritable mansions which have every convenience and comfort.

Chapter XXV.

Sport.

The Australians have been described by critical visitors as sport-mad. This book has shewn that they are equally enthusiastic about the more serious aspects of life. It is, perhaps, because their enthusiasm for sport is so obvious—so much more patent than in other directions—that they have come in for censure by superficial observers who, after a few week's tour through its more popular centres, have written with seeming authority on the Commonwealth.

It may be conceded that Australians excel at international sport out of all proportion to their numbers. In cricket, football, tennis, swimming, athletics, rifle-shooting, rowing and even billiards, world champions have time and time again been produced. I think that it is largely because there is a greater percentage of participants to onlookers in the Commonwealth than elsewhere. The climate is all in favour of the promotion of outdoor sport and the Australian who does not indulge in some manly game is an oddity.

There is an almost complete absence of professionalism. Except to a limited extent in football in the chief cities, the players for the overwhelming part are men who earn their living at some profession, in business, or at rural or other work.

SURF-BATHING is extraordinarily popular. Each centre along the ocean coastline has its surf club. Keen competition obtains between members to be classed as life-savers. Only very powerful swimmers, skilled in

rescue work and methods of resuscitation are permitted to wear the coveted badge on their bathing costumes.

The surf is treacherous at times. Channels in which strong currents are encountered occasionally occur in a few hours where previously the water was quite safe, and unwary bathers may be caught in the undertow.

At some popular resorts towers are erected on steel framework, and, on every beach from which surf-bathing is indulged in, there is always a man on look-out duty. The fin of a shark may cleave the surface of the water inshore. An alarm bell clangs, and the bathers,—there may be over 10,000 in the surf together on a public holiday at such places as Manly or Bondi, in New South Wales—scamper from the water to sunbake on the beaches until the all-clear signal is given, when the more venturesome are soon followed back into the water by the thousands, and the shark is forgotten. But sharks are rare visitors. Off most of the beaches they are never seen.

During the past three years, to my knowledge, three lives have been lost owing to attacks of these sea tigers, and two other people were seriously injured. But when it is remembered that millions surf annually the risk is not nearly so great as that which is incurred in crossing a traffic-filled street! Similarly it is a rare occurrence—unless a person be so foolhardy as to enter the surf alone in some remote place—for a bather to be drowned. Statistics prove that motoring is infinitely more dangerous. This is chiefly due to the wonderful and wholly honorary work of the surf clubs.

The incidents surrounding the four attacks by sharks were marked by extraordinary heroism. In all cases numbers of men rushed to the rescue and tore the victims out of the jaws of the ferocious fish.

In the event of a bather being in difficulties with an undertow, he has merely to raise his hand, in response to which the life-savers rush to his assistance. The whole business is done with precise routine. No. 1 saver takes the end of the life-line from its reel, which is always in readiness. This is affixed to a life-belt which he adjusts as he dashes into the surf. He

then swims with powerful strokes to the person in difficulties. The bearer of the life-line is assisted by others; each has a pre-allotted task. These men know exactly how to deal with those who lose their wits when in danger of drowning. I have seen hundreds of rescues essayed and never one to fail. The surf clubs hold many competitions. The men are bronzed Apollos whose superb physiques shew to perfection under the meagre swimming garments, and the teams are drilled with military precision. A massed parade of surf clubs is an inspiring sight.

The vast rollers tumbling in from the Pacific, the Southern, and the Indian Oceans wage relentless war alike at the rock strewn bases of precipitous cliffs and the stretches of golden—sand, not shingle—beaches. There is surely nothing in the world more invigorating than to be borne on the crest of a wave—a vast roller, diminishing and breaking as it advances till, in receding, it deposits the surfer in a nest of glistening foam on the smooth, firm sands. But to ride the waves in this fashion calls for much practice and skill; merely to romp in the surf is to experience a delightful invigoration. As many girls and women surf-bathe as do youths and men. The Australian may well say, with Byron—

“Ah, I have loved thee, Ocean, and my joy
Of youthful sports was on thy breast to be
Borne by thy billows onward—they to me
Were a delight.”

One is able to enjoy swimming for not more than five months of the year in Great Britain, whereas in the Commonwealth it is a pleasure for any healthy person to swim during an average of eight months annually.

There is no surf in the bays or other inlets where, owing to the danger of sharks, swimming must be enjoyed in large enclosed areas.

HORSE-RACING. Perhaps the Australian is a little too fond of this sport. There are races nearly every day, and at certain seasons of the year, when the more important meetings are held, little else is talked

about. The Melbourne Cup, a sweep-stakes of three miles run under the auspices of the Victorian Racing Club, is an event of national importance, and people in all parts of the continent breathlessly await the result, on which millions of pounds are staked. The actual cup carries with it a prize (depending on the number of nominations) of about £6,000! The race is run at Flemington, near Melbourne. The Flemington course has no peer in any part of the world. Behind the stands looms a high hill from which tens of thousands can see every stage of the races. The hill in turn is topped by a series of huge covered pavilions. Glorious lawns and gardens front the grand stands, which provide comfortable seating accommodation for upwards of 100,000 people, each one of whom can see all the races from start to finish. Special trains run to the club's private platforms within the course, and there is parking accommodation for thousands of motor cars. Flemington is the model for all courses throughout the Commonwealth.

Such is the Australian's love of a good horse that the smallest towns have their strings of thoroughbreds in training, and the strain is reflected in the mettle of all Australian horseflesh. In the country districts the picnic races are most delightful functions. All officials and riders are amateurs, and there are definite rules as to the amount of special training that is permitted to be imparted to the horses.

Races are always accompanied by great displays of hospitality and those who participate have little acquaintance with bed during race-weeks.

CRICKET. The cricket prowess of the Australians needs no elaboration here. Cricket is the national summer game and is played in every corner of the continent.

FOOTBALL is unfortunately hampered by the variety of rules that are observed. Rugby has pride of place in New South Wales and Queensland. Soccer also has its devotees. The other States prefer the Australian game, which, although played with a rugger ball, differs altogether from the mother game in point of rules. But it is a fast, clean, game over which the

spectators develop an extraordinary enthusiasm. Crowds exceeding fifty thousand are not unusual at the league matches in Melbourne.

TENNIS is becoming more popular each year. It is played in all parts of Australia. The most important club is that recently established at Rushcutters Bay, Sydney, where already sixty grass courts are being played on and where ninety will soon be available. This will mean that at one club over three hundred will be able to play at the same time, and there are hundreds of other clubs, as well as many thousands of private courts, throughout New South Wales and the other States. The game is especially popular in the country districts. In small bush settlements the personnel for a cricket or football team may not be available. But any two enthusiasts can play tennis, and the making of an earth court involves but little trouble.

In Victoria tennis is usually played on asphalt. Grass courts are more usual in New South Wales, whereas in other States the game is generally played on hard earth. Tennis is popular all the year round.

GOLF is well supported, and excellent facilities are offered to players. The principal cities have quite a number of courses within half an hour of their centres by electric tram or motor. Sydney has about eight eighteen-hole courses and Melbourne has six. The largest and perhaps the finest is the Royal Sydney, the new club-house of which was recently erected at a cost of £85,000. It is situate close to Sydney Harbour, of which a magnificent view is obtained from the club premises, which are residential. The total membership is 2,000, but only 500 have full privileges, the remainder being associates or provisional members, who may not play during week-ends or on holidays. This club has thirty-five tennis courts attached to it, as well as a nine-hole golf course for the exclusive use of ladies. The men's eighteen-hole course is over 6,000 yards in length, bogey being eighty, and the course is well bunkered. The Royal Australian Golf Links, also at Sydney, and the Royal Melbourne Golf Club, leave little to be desired from any point of view. At Seton, in Adelaide (South Australia), there is an

excellent eighteen-hole course in ideal golfing country. The provincial towns inland all have their links which are well patronised. Where water is scarce "greens" are sometimes of hard bare sand but, when one becomes accustomed to the surface, putting is no more difficult than on grass. Each year open and amateur championship events are played for in each State as well as in the Commonwealth as a whole, and considerable interest is shown in these matches.

OTHER GAMES. Lacrosse, hockey, baseball, and bowling clubs and associations flourish in all States.

AQUATICS. Rowing is a favourite sport, especially along the Murray river. There are numerous clubs at all capital cities and provincial towns. All the capitals are situate near the sea coast and aquatic sport is in high favour. Yachting is exceedingly popular. The amount of sail carried by the eighteen-footers in Sydney Harbour and other bays is greater than in similar vessels in any other part of the world.

On all the bays, on the larger rivers, and on the inland lakes, there are fleets of yachts, motor and row boats, and launches. Motor boat racing has many enthusiastic supporters. Henley-on-Yarra (at Melbourne) with its delightfully decorated houseboats, punts and canoes, its keenly contested races, its social parties, its illuminations and fire-works by night, and the general carnival spirit which it begets, is to rowing what the Melbourne Cup is to horseracing.

POLO is not so generally played as might be expected where the horse is so much in evidence but there are several clubs, and the increase in numbers of polo ponies bred, and the popularity of the game and proficiency of the players are such that there is every reason to expect that an Australian team will soon be joining issue with others at Hurlingham and in the international sphere in general.

OTHER SPORTS. Every sort of athletic game has a wide vogue, and cycle and motor races are well patronised. Rifle-shooting makes a wide appeal, and the skill of the Australian marksman was again apparent when our team recently established a new record at Bisley.

SHOOTING AND FISHING. The only big game hunting obtainable is among the buffaloes of the Northern territory. The manner in which the buffalo is killed is to shoot him at the gallop from horseback. The rider singles out his beast and galloping alongside shoots from a rifle with half the barrel sawn off. But it is not nearly so simple as it might appear, as the buffaloes may have notions of their own. If they charge towards the shooters the situation is likely to become interesting, and in any event galloping over rough country provides plenty of excitement.

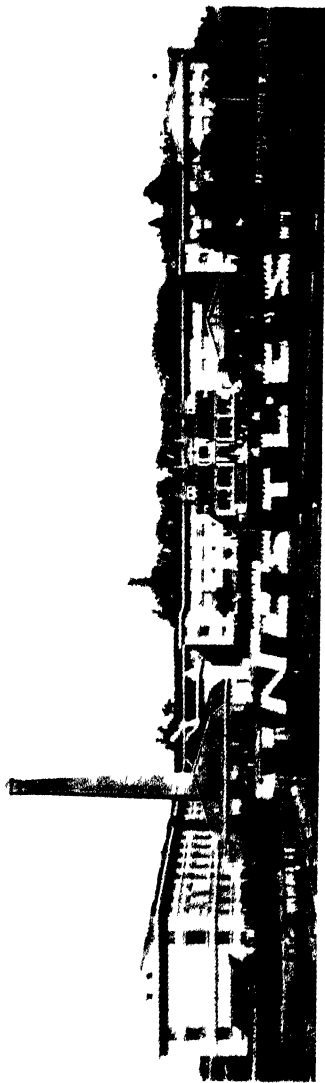
Kangaroo shooting requires a deal of skill and marksmanship, but it is indulged in more as a business than as a sport.

Rabbits are so plentiful in Victoria and New South Wales that shooting them is apt to pall. Hares and foxes offer better sport. But most shooting is among birds—wild duck, snipe and quail—of which large bags can be secured in many districts. There is a close season for all such birds.

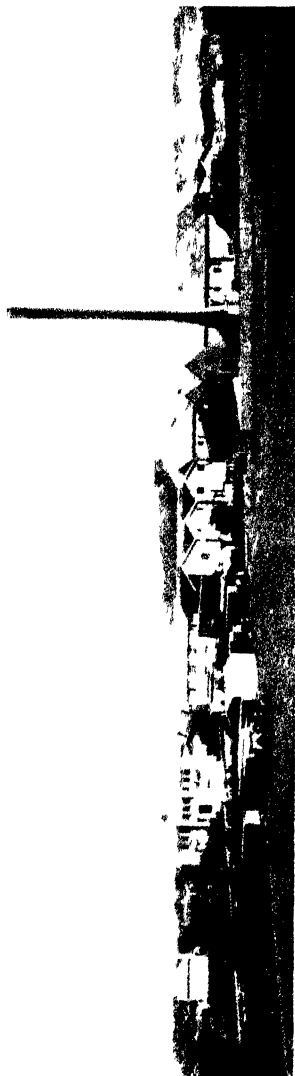
Trap shooting is fairly popular but there is an ever increasing public objection to the slaughter of pigeons in this fashion. Many clubs now shoot sparrows and starlings, which are pests. Clay "birds" also are used. But shot-gun shooting is not taken so seriously as in England, perhaps because it is not a class sport as in the United Kingdom.

There are rifle clubs throughout the length and breadth of the Commonwealth. The members, who number nearly 50,000, are required to be natural born, or naturalised, British subjects. The organisation, while being under civil control, is looked upon with great favour by the Defence Department, which supplies the clubs with ammunition on special terms. The Australian marksmen, as has been mentioned elsewhere, have shewn their superiority over all other countries within the Empire as recently as this year.

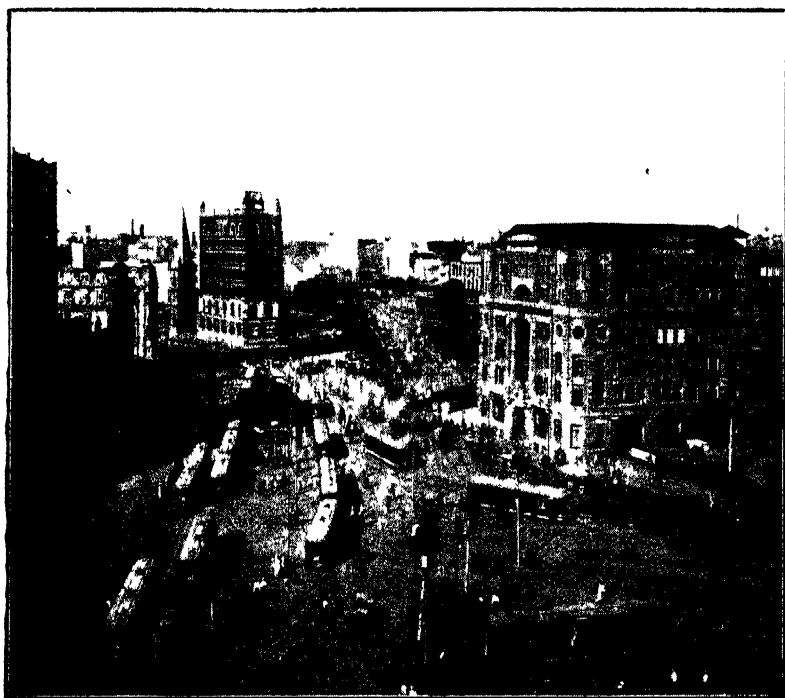
FISHING. Neither is this a class sport as in England. Generally speaking it may be said that any one may fish in any stream. The rivers abound with natural fish, and the fast-flowing streams are stocked with trout. As I have never taken much interest in



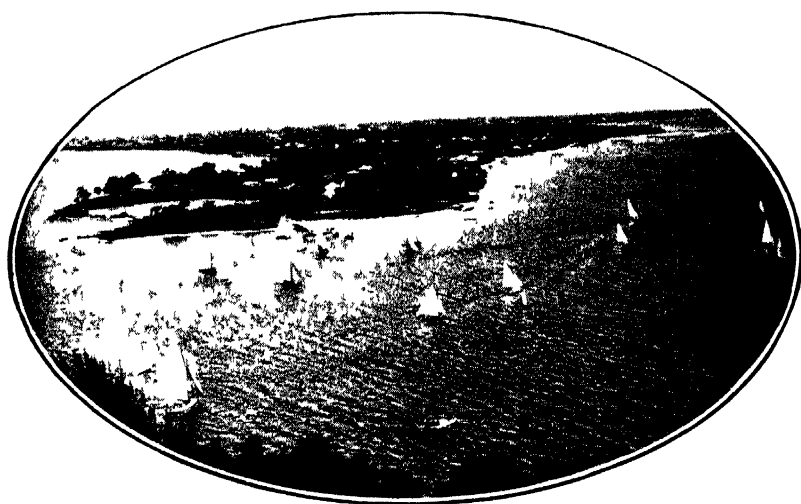
An up to date Chocolate Factory (Sydney)



One of the largest Milk Condenseries in the world—Western district Victoria



Railway Square, Sydney



Yachting on the Swan River, Western Australia

angling I cannot do better than to quote from an article by Mr. Donald McDonald, one of Australia's foremost field naturalists and writers :—

“ In the acclimatisation of trout in Australia the two species which have been most widely established are British brown and Californian rainbow, the latter coming into preference in later years, because it was believed to be the better sporting fish, rising more readily to the fly. For this quality anglers were not disappointed in them, although as a set-off the rainbow has some disadvantages. In the shorter coastal streams, such as those of Southern Victoria, it shows a disposition at maturity to make for the sea, and the belief is that these larger fish seldom if ever re-enter the home river. When brown trout make for the sea they remain about the estuaries, and grow to an enormous size.

“ Apart from Tasmania, which was the first of the Australian States successfully to establish trout, and which for many years furnished the trout fishers of all Australia with their sport, the great trout area of Australia is the south-eastern corner of the continent, its mountain area, of which Kosciusko, the highest peak in Australia, may be taken as the central point. Stretching away on all sides to the southward far across the Victorian border, northward to the many tributaries of the Murrumbidgee, is a mountain province as large as all Scotland, wild country for the most part, range upon range, with innumerable clear mountain streams, most of them snow fed. It was an ideal home for trout, because, while the lowland rivers which these streams feed were well stocked with native fishes ranging from the giant Murray cod downward, these are, in the main, still-water fishes, seldom penetrating to highland waters. So this vast network of mountain streams carried few fishes larger than tiny mountain minnows. It was made for trout, and once established by means of private and public hatcheries, they increased amazingly. As a consequence there has never been need to fix a bag limit, because there is not the least danger of this vast trout land ever being over-fished and exhausted. On the contrary, brown trout and rainbow are ever spreading, finding new streams by the hundred, and working their way up continuously towards the sources. The angler, whether bait or fly fisher, who cannot fully satisfy his trout hunger in such circumstances must have an insatiable appetite.

“ Trout fishing in Australia is free to all, and even the size limit fixed is hardly necessary, since the custom in the great trout area to which I have referred is to return all trout of less than a pound in weight.

“ In Tasmania the trout attain larger weights, having been caught up to twenty-eight and thirty pounds. At Great Lake the season's average per fish runs to about six pounds. In the 1922 season the heaviest brown trout caught weighed fifteen-and-a-half pounds.

“ For sport or for the table the finest fish in Australia is the

Murray 'cod,' which is really a giant freshwater perch, running up to a hundred pounds in weight and a length of about six feet. Of course, that is an extreme size, and these river kings are not so plentiful as in the early days, but that is rather a gain than a loss, because, like most big fish, they become cannibals, preying largely upon their own kind, as well as upon other stream fishes, snapping up, too, in the lakes and lagoons many young duck and other water-fowl during the breeding seasons. To kill them off is a gain to sport. The great value of the Murray cod—to give it the name which at least distinguishes it from other freshwater perch of the same streams—is that it has not seriously decreased with settlement, because in the beginning it was widely distributed. The Murray and its tributaries extend over thousands of miles, north through the great State of New South Wales, far into Queensland, and southward into Victoria, taking finally its great concentration of inland waters through South Australia to the sea. In every tributary is the Murray cod. Fresh homes and haunts are always being established for him, too, in the great lake basins and reservoirs created as storage areas for irrigation. From one of those basins alone, the Burrinjuck Reservoir, on the Murrumbidgee River, of New South Wales, an expert Mr. David Stead, naturalist to the Board of Fisheries, New South Wales, has calculated that the supply of Murray cod for market may be increased by nearly three million pounds per annum.

"The finest all-round fish in the world is, without much doubt, the North American salmon, which maintains the canneries upon so many Pacific outlet streams, but after it the Murray cod has no peer, and I say that with the belief that even Australians themselves have not yet nearly realized its full value. Even in the case of the Steelhead salmon, it is great only 'on the run,' and has to be cultivated in many hatcheries. The Murray cod is in season for ten months of the year, is being killed by many thousands of anglers and fishermen all over the interior, but has never yet been cultivated. Until a quite recent period, it was regarded as a sluggish fish to be tempted preferably with live bait. Then in a lucky moment some one tried a spoon and spinner, and discovered all at once that with the streams clear, as they are for the greater part of the year, the giant perch was a fine sporting fish, coming freely at the spoon, and making if not a very long fight a fierce one while it lasts. Now the spoon is in almost universal use.

"Not because it is absolutely the best of river fishes, but because, having most of the merits that a good sporting fish ought to possess, it is so general, so accessible, yet never too plentiful, the Australian angler sets a high value upon black bream.

"BIG GAME OF THE SEA.—Although we have in Australian seas the giant fishes which correspond to the tarpon of Florida waters in America, and Santa Catalina off the Californian coast, what may be called 'big game' fishing has not yet been really

exploited by Australians, and the explanation is that, with big fish so easily obtainable both by stream and sea, there is no temptation to go further for sensation. The 'ox eye herring,' of the Queensland coasts is almost, if not quite, identical with the tarpon, 'the silver king' of Florida. In South Australia, and especially about the Murray, the mullovey, ranging up to one hundred pounds is a fine game fish, the sporting qualities of which are becoming better known, though there is always some confusion as to its identity, because in every State it has a different name—king fish being most common in Victoria, and jewfish further north. The few experiments made with big sea fishes on the New South Wales and Queensland coasts proved the possibilities in thrilling sea sport. In addition to tarpon, there was the tuna or tunney, the giant sword fish, both like the king fish, apt to be got on one excursion along the New South Wales coast, and seldom far from shore. A fifty pound king fish will give an hour's fighting before it is safe to attempt to gaff him. Amongst the few records made or kept is, for one day's fishing, six Spanish mackerel averaging sixty-five pounds apiece. But the few sea fishers who have tried this sport reckon the tuna the gamest fish of all, for in his first dash for liberty he will go nearly sixty miles an hour. One of them carried out five hundred and sixty yards of line in two minutes, and a fair allowance in fighting time is a minute for every pound of his weight. In the calm summer seas of the east coast of Australia, this form of sea sport must, sooner or later, become popular.

"As I have said, the snapper is really the sea king to the angler—the more prized because in the chief cities—Sydney, Melbourne, Adelaide, and Perth—it comes in season almost to our doorsteps. All the capitals of Australia are coastal cities, so any man who loves fishing—and in the cities they number thousands—may upon every week-end or summer holiday get his sea sport more cheaply, more easily, and in a finer form, whether for sport or for the table, than it is obtainable anywhere else in the world. It seems a large boast, but with some knowledge of other lands, and living here within a few miles of the coast, seeing every week-end the fleets of boats lying close in shore, motionless in a silver sunlit sea, I know by almost daily experience just what that one big handsome fish means in recreation, in health and in food as well, especially to the working men of the city who take their pleasure that way. Their numbers are always increasing, as one after another catches the infection of it. And the snapper is worth catching, worth looking at, and worth eating; has been ever since those far back days when the first Dutch navigators caught and named him 'Schnapper.' He is the universal sea fish of Australia, found upon every coast of the Commonwealth, sturdy in build, conspicuous in colour, a universal rich salmon-pink, which becomes deeper and finer with age. The young fish is flecked over with spots of shining opal blue, which gradually fade away when the fish is taken out of the water

The snapper congregate close in shore on or over bottom reefs in from ten to forty feet of water. The schools of young fish range inshore, become 'takeable' in Victorian waters at a length of nine inches. With the exception perhaps of a few old fish, they range in schools of about equal size, from five to fifteen pounds, with occasional fish up to twenty or even thirty pounds. Having located a good reef or two, the snapper fisher, in fair weather, and in the season which lasts usually from early spring to late autumn, rarely misses sport.

"Next to the snapper, the sea pike, so named from a slight resemblance to the jack pike, of English streams, gives the sea anglers and fishermen of Victoria especially their finest and most continuous sport. A fast-swimming surface fish, running up to six or seven pounds in weight, it is usually caught by trolling from a slowly moving boat. Two species of whiting are also amongst the most valued of Australian sea fish. The spotted whiting of the southern coast of Australia frequents shallow sea inlets with heavy seaweed growth and little open sandy spaces or potholes, the margins of which are the favorite fishing ground. The Southern whiting closely resembles in colour and markings an English brown trout, and is a really handsome fish, though less beautifully marked. The sand whiting, of Sydney, is an equally fine table fish. There are innumerable sea fish in Australia. I mention but the few to which the sea-angler of Southern Australia, especially, looks for constant sport. Amongst the edible river and sea fishes of New South Wales alone, Mr. David Stead describes and illustrates over eighty varieties."

SHARK fishing provides plenty of excitement. To account for a ten-footer with a rod and line requires a deal of patience and skill and some daring. This sport is indulged in both from shore and jetties, as well as from yachts, and motor and row boats. When exhausted and pulled alongside the monsters are either shot or harpooned.

COURSING is popular in the Southern States, especially in Victoria.

FOX HUNTING. There are a few packs of hounds in Victoria but I do not think any are maintained in other States. The difficulty which confronts the huntsman is the ubiquitous six wire fence. Hedges are seldom seen, as they have been found to harbour such vermin as rabbits and sparrows. But there are many stone or rail fences in Victoria, in some districts of which the sport has quite a vogue. It seems unlikely that fox hunting will extend throughout the Commonwealth, though a group of enthusiasts could establish

the sport in any State. Very little glamour surrounds the fox in Australia; he has made himself so unpopular that he is shot on sight.

Chapter XXVI. Journalism and Literature.

People throughout the whole of Australia are well served with newspapers which for the most part exercise a vigorous and helpful influence on the politics of the country and the lives of the people. Some of the morning dailies have circulations approaching 200,000. The old established journals, such as the *Sydney Morning Herald*, and the *Daily Telegraph*, in New South Wales, the *Age* and the *Argus* in Victoria, and one or two in each of the other States are produced in the same manner as are the *Times*, *Daily Telegraph* and *Morning Post* in London; but unlike British sheets all Australian dailies are sold at one penny.

Of recent years there has grown up, especially in Sydney, a type of press which deals in sensationalism and scandals—or alleged scandals. But even these papers perhaps do some good though sober minded people do not take them very seriously.

The evening journals, especially the *Herald* (Melbourne), the *Evening News* (Sydney) and the *Sun* (in both cities), set a very high standard.

The most noteworthy weekly is the *Bulletin*, (Sydney). This publication, which circulates extensively throughout the whole of the Commonwealth, New Zealand and the Pacific Islands, has done more to mould Australian national sentiment than any other journal. Although slow to praise—it generally waits till a man is dead before venturing upon his fine points—it is quick to condemn chicanery or vacillation in public men in a forceful and exceedingly pungent manner. But though it is sometimes wrong it is never scurrilous. Its literary reviews are indeed noteworthy, and, as an indication of the range covered in the columns of this journal it may be mentioned that its "Wild Cat" page is regarded as one of the most reliable financial commentaries in the Commonwealth.

The *Bulletin* has always been a staunch patron of Australian art and literature, and many artists and

writers who have achieved fame had to thank the late J. F. Archibald—for about twenty-five years the *Bulletin's* Editor—for the early and practical recognition of their merits.

The early Australian writers found no aboriginal history for legendary lore which, finding expression through some of the first colonists, might have added to the world's stock of romance. The exploring of the continent did not inspire any great work though it might well have done so. The sordid convict area provided data for one famous book "*For the Term of his Natural Life*" by Marcus Clark, which was made notable by its subject rather than by its treatment. The bush-ranging era inspired *Robbery Under Arms* by Rolph Boldrewood (T. A. Brown) and in this case also it was perhaps the subject which commanded such wide attention.

Until a comparatively recent date there has been little literature which was distinctively Australian in the sense of showing a different outlook on life or a different sense of literary values from that of the average contemporary English writer. Adam Lindsay Gordon, whose poems are widely known, wrote—in Australia—of Australian subjects from the standpoint of an English squire.

But the end of the nineteenth century saw the beginning of a more characteristic Australian literature. The people gradually responding to the influences of the fierce sunshine and the freer conditions of life began—as has been said—to form a special type—debonair, a little cynical, enduring and brave, ruthless in some respects. These qualities commenced to assert themselves in their literature. A hedonistic joy in life, a seeming disrespect for authority, a freakish humour—such qualities outcrop often as one explores the fields of contemporary Australian literature.

Mr. J. F. Archibald made it his mission to encourage young Australians to write of the life that was peculiar to their continent. He was a wit with a fine flair for phrase; a sentimental cynic; and he was passionately Australian. Mainly under his aegis there came forward a school of writers which included

the late Henry Lawson, who gave in short stories and verse faithful glimpses of the bush and its dwellers; A. B. (Banjo) Paterson, a singer of the racketty, horsey life of early Australian sheep stations; Louis Becke who pictures South Sea Island life; A. H. Davis (Steele Rudd) who writes broadly comic, and yet sympathetic, if rather exaggerated studies of life on the smaller farms; Roderic Quinn and the late Victor Daley (both of Irish extraction and giving in their verse two different and yet both characteristically Australian modifications of Celtic melancholy); E. J. Brady, writer of sea-songs and travel; Ethel Turner a graceful novelist of Australian childhood; Randolph Bedford; Bernard O'Dowd; W. H. Ogilvie; Mrs. Barbara Baynton; Mrs. M. Forest; Miss Mary Gaunt; Mrs. Aeneas Gunn, and many others who make the Australian literature of to-day. As exponents of life in Australia during the first quarter of last century, J. H. M. Abbot and Roy Bridges are the best known.

Chapter XXVII.

And in Conclusion.

I have sought in the foregoing chapters to tell my readers something of the phenomenal development of a virgin continent during its little more than a century of civilized occupation; something of the lives of the *young of the British* who dwell therein. One might write indefinitely upon what is surely an absorbing theme, but space restrictions bid that this shall be the last chapter.

What I have written has dealt for the most part with rural life in the Commonwealth. I make no apology, because the exploitation of primary wealth is the foundation of national greatness as typified in a well-nourished, intelligent, energetic, virile and law-abiding people; as exemplified in their prosperous, efficient secondary industries.

A volume might be devoted solely to the manufacturing enterprises flourishing throughout Australia, but, in this book, the briefest reference thereto must suffice.

As is generally known, but—unfortunately—not

so generally understood, Australia is a protected country that is to say she has a tariff to encourage the establishment and growth of her manufacturing industries. But this tariff is sensibly applied. The Australian's motto is, "Let us make what we can for ourselves and purchase what we cannot manufacture, in the Motherland." Substantial preference is given to the United Kingdom in all respects; in many cases the tariff serves no other purpose than to protect the British manufacturer. This is notably so in regard to cotton. So far, the initial manufacture of cotton textiles has not been put on a commercial basis in the Commonwealth, and yet there is a duty on cotton goods imported. By no stretch of the imagination could this be construed as benefiting Australia at the expense of the Motherland because *it is applied only to foreign countries*. It amounts to fifteen per cent. of the value of the article.

British cotton is admitted free of duty and the imports last year amounted in value to over six million pounds. If the cotton material is made up into garments in England the Australian purchasers must pay duty to protect the clothing manufacturers in the Commonwealth; but here again the tariff is fifteen per cent. less than in respect of foreign goods.

The Australian customs regulations, if studied, will reveal the extent to which consideration has been given to the manufacturers in the United Kingdom. None has been given to those in foreign countries.

It is worth while to examine the fundamental reasoning behind the Commonwealth's tariff policy in relation to the ideal of all Imperialists—*free trade within the Empire*. I venture to outline what I believe to be the attitude of Australians in that respect.

It is necessary first to bear in mind the reason which actuated those who left the Mother country to develop the Island Continent. Obviously they sought to better their state in life and that of their children; and the overwhelming percentage did, in fact, do so. It will be conceded, I think, that the general standard of white man's living in the dominions and colonies is better than in England. This is certainly the case



- 1 Finish for the Melbourne Cup
- 2 Weighing in
- 3 The Lawn, the Hill and small section of Grand Stands



Duck shooting in North Queensland (airridges are kept in the tin tied to ones waist as the shooter is often up to his neck in water)



The author (in rear) negotiating Torrens Creek (Queensland) on Xmas Eve 1909
was taken by another rider (G Black) The horses are swimming The photo

comparing Britain with Australia, where the gross wealth, *per capita*, is greater, and more evenly distributed than in Britain. The latter end is achieved chiefly by the payment of higher wages, which—while admittedly increasing cost of production—at the same time enables the workers to be themselves more extensive purchasers.

I would remind my readers parenthetically that few manufacturers—in any part of the world—lie awake o' nights devising ways and means of increasing their output. The difficulty which confronts them is the selling of their goods when made. The British manufacturers of cotton textiles and other articles which are admitted (from Britain) to the Commonwealth free of duty are really much better off in the Australian market than in the United Kingdom where they have *no* protection against cheap foreign goods. In the Commonwealth not only have they a decided advantage over the foreigner but there is no local competition.

Working conditions in Australian factories are certainly in advance of those in Great Britain.

Many factors result in a relatively high standard of living among all classes of the community in the Antipodes. The initial outlay in respect of the establishment of any manufacturing enterprise in a new country is heavy. The Australian factory owners cannot—as yet—economically compete with the mass production carried on, and relatively low wages paid in old established countries.

The general attitude of the people—it is frankly to be admitted—is towards making the Commonwealth self-contained. But, they must find a market for their surplus raw materials and, just as surely, they must take manufactured or luxury goods in exchange; but it is their wish—as tangibly expressed in their tariff policy—that all such trade should be with the Mother country.

Ethically, it is an unassailable policy to spend on locally made goods the money derived from locally sold primary produce.

When the general standard of living, as repre-

sented (largely) by wages paid—in relation, of course, to local cost of essential commodities—becomes, more or less, uniform among the white people of the Empire, the realisation of the ideal of inter-imperial *white* free trade will surely be within the range of practical politics.

If Australians were all primary producers at the present time, matters would bear a different complexion, but they are *not*; and even if it were possible to direct every individual's activities into the region of primary production, such action would be as undesirable as it was anachronistic.

To revert to the reason these people, or their progenitors, left the British Isles and the industrial conditions obtaining therein—which as we have seen was to pioneer and maintain a new and a better order—if they abandoned their tariff policy (before the manufacturer in the Commonwealth could compete on level terms with his fellow in the United Kingdom), they would, in all reason, sacrifice a legitimate advantage, for the possession of which the Australians have themselves to thank. If, and when, standards of white men's living become uniform throughout the Empire, no dominion or colony will have any moral right or defensible economic reason to impose a duty on goods produced in other British countries.

The matter for regret is not that the standards of living in the dominions—behind tariff walls if you wish—are high. The unfortunate aspect is that the same order does not, as yet, obtain in Great Britain; and so long as the economic disorder of affairs in the United Kingdom—as set out in the Important Foreword—is permitted to continue, the prospect of raising the general standard of living in this country to the level of that in—say—Australia is remote. But the ready remedy rests with the people themselves who dwell in the Homeland.

And now a word about the meeting of customs duties in general; they are paid by the Australian purchaser—most emphatically not by the British (or other) exporter. Although in respect of many commodities—as with plain cotton textiles—no duty is

charged on British goods imported, the Australian is called upon to meet heavy duties on any foreign made goods he may buy; wherein he pays only the price of his own economic folly.

In 1922 the Commonwealth's chief manufacturing industries, with their outputs to the nearest million pounds, were as follow: foodstuffs, £111 million; clothing, £43 million; metal works and machinery, £56 million; heat, light and power, £13 million; tanning, fellmongering, &c.; £16 million; stone, glass and clay, £9 million; woodworking, £17 million; furniture, £6 million; vehicles, £7 million; drugs and chemicals, £8 million.

The industrial workers are well organised, each trade has its union and all are combined. The most serious strikes that have taken place of recent years have been in the mining and shipping industries but a better spirit of co-operation between employer and employee is developing. A statement issued recently by the Commonwealth Statistician shews that during the past year there were fewer strikes or lock-outs than during any twelve months for the preceding five years.

The output per worker in the factories compares more than favourably with other countries. For the year ending June 1922, the following table is self-explanatory:—

Value of manufactured output ...	£320,331,765
Value of materials used	£190,410,625
Wages paid... ..	£68,050,861
Added value per employee ...	£329
Wages per employee	£179

The term employee embraces male and female, adult and youthful workers, whose average wages were about £3 10 per week.

This brings me to a broad survey of the actual wealth in cash alone of the people; and to a survey of the *distribution* of such wealth.

In 1922, of every thousand persons—men, women and children—613 possessed savings bank accounts which averaged £47 10s. 10d. per depositor. This in turn meant that the *pre-capita* (as against the pre-

depositor) cash reserve in savings bank amounted to £29 2s. 10d. Now savings banks cater almost solely for wage earners—certainly not for the capitalists. If families normally number four persons, it meant that the average cash reserve per family was £116 11s. 4d.!

With regard to ordinary—or cheque paying—banks, the average cash deposit per head of the *population* during the same year stood at \$51 19s. 1d. Assuming as above, families to average four persons, the cash reserve per family in ordinary banks stood at £209 16s. 4d.

The two sets of figures total £326 7s. 8d.* per family!

I have advisedly separately quoted the deposits in savings and ordinary banks because the former tend to indicate, more or less positively, the prosperity of workers. And be it remembered that there were fewer industrial disputes in Australia last year than during any preceding twelve months for five years.

The bank figures from 1917 to 1922 shewed a progressive increment from year to year, the average annual increases in ordinary deposits being 27/-, and in savings bank accounts 24/-. Increase in wealth—in cash—has, therefore, been almost uniformly distributed.

May I emphasise that this takes no account of wealth represented by property in the form of land, buildings and plant, furniture and so on. But it is worthy of mention that nearly a million persons own their own homes.

I am unable to draw comparisons between the wealth of Australasia and other countries because I know of no others which publish similar statistical records; but, were it possible to make any such comparison, I venture to assert that Australians—and New Zealanders—would be proven by any comparison to rejoice in a unique prosperity.

I am tempted to embark upon a discussion concerning Australian migration policy and its administration, but if this book interests people sufficiently to cause them seriously to consider settling in Australia

*Commonwealth Year Book, pages 430, 432, 433.

surely they will approach the appropriate department at Australia House, there to obtain precise details as to the various migration schemes which are in operation in respect of the several states. Although these are diverse in detail, they are all administered as from one central authority at the Australian Government's headquarters in London.

The Overseas Settlement Act earmarks a large sum of money annually whence the Imperial Treasury is empowered to expend £ for £ with the various dominions and colonies, on migration and land settlement. It is to be borne in mind that the new settler, even though he may not go out under the auspices of a government scheme, can secure substantial assistance towards meeting the cost of passages for himself and the members of his family. Full particulars may be had at Australia House.

While I remain in London I shall be happy to discuss matters concerning the Commonwealth with those of my readers who may be intending new settlers or those anxious to establish or extend Anglo-Australian trade relations; at the same time I have no desire nor intention to encroach upon the functions of the officials whose proper activities are to deal with such matters.

At the time of writing a movement is on foot, initiated by Sir Roland Bourne, K.C.B., C.M.G., whence it is hoped to form a strong imperial committee of independent, public-spirited men and women to assist imperial migration—functioning, of course, in concert with the various official organisations. Such an institution would be able to render yeoman service.

Before concluding this reference to migration, I wish to make it clear that the Australian people have no stomach for individuals who want the government to act as foster parent *ad infinitum*. Admitted, a certain amount of shepherding is called for in nearly all cases, and a measure of financial assistance in some. But it is a spirit of independence in the new arrival, a cheerful acceptance of occasional uncongenial occupations—pending the acquisition of local knowledge—an evident determination to succeed; it is such

characteristics which secure tangible appreciation in this newly settled continent, and it is those attributes which will bring ample reward.

Let it be emphasised that one hears more of one failure than of nine successes, for the simple reason that failure is unusual and success so general as to create no comment.

The Commonwealth has a population of under six million with an area twenty-eight times as large as Great Britain with its forty-seven million people. I have already said—but now repeat—whereas the average rainfall in London is under twenty-four inches per annum—this figure does not include 1924!!—an area of Australia fourteen times that of the United Kingdom has an average rainfall of from fifteen to sixty inches per annum. And I would reiterate that it is estimated that there is water supply and irrigable land available to irrigate an area three times that of Great Britain. It has been proven that each hundred acres of irrigated land provides thirty-three persons with comfortable sustenance and with the normal amenities of modern civilisation. On that basis the irrigable portion of Australia would carry a population of ninety million and there would still be available eight-ninths of the continent for ordinary settlement.

Surely this glorious heritage of the British peoples *demand*s appreciation and exploitation by British brains, energy and capital.

Throughout past ages Great Britain's wonderful strategic strength has lain in her geographical insularity. The narrow channel—across which men can even swim—has for centuries, until the past decade, enabled the Royal Navy to present an impassable barrier to any would-be invader. With the conquest of the air, Britain is now but little better off than European countries with their foreign frontiers.

Australia has ramparts of oceans—thousands of miles wide—on all sides. It is almost safe to say that the Commonwealth is immune from effective air invasion. It has no foreign frontiers; no bi- (much less poly-) linguistic difficulties. Its people have a common ancestry; as I emphasised at the outset

Australia is a White Continent. No coloured people are admitted to its shores. Ninety-eight per cent. of its citizens are of British descent. Dogma apart, Christianity actuates all that is best in them; they are all imbued with the same domestic, social, and national ideals. They are fervid imperialists and intensely loyal.

The man (or woman) in the United Kingdom who would settle overseas should remember these facts.

Migration with a view to *remaining* in a foreign country is surely inconceivable to the thinking man, who maybe has fought, and certainly whose progenitors fought for the priceless boon of British citizenship. Settlement in a foreign country, if the new arrival is to be on even terms with his fellows, involves naturalisation in that country; involves the sacrifice of British citizenship and all it connotes; meaning that his children—and their children—will grow up foreigners, maybe even to bear arms against the people who will then dwell in the land of his forefathers.

Too long have we been content to see the British Empire pre-eminent among *individual* foreign countries and empires. What should now be striven for (and effected) is to make the British Commonwealth of Nations more powerful than any other conceivable *group* of nations—more beneficently powerful, that is, in the world's affairs.

THE END.

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APPENDIX.

The Prime Minister of Australia (the Right Honourable S. M. Bruce, M.C., M.P.), to whose staff the author had the privilege of being attached at the time, made a remarkable speech at the (Imperial) Economic Conference, 1923. The following are certain facts mentioned by Mr. Bruce, followed by various telling extracts from his speech.

During the year ending June 1923 the actual cash value of the preference given by Australia to British exporters was £7,600,000; that is to say, if Australian purchasers had been required to pay the same duty on goods entering the Commonwealth from the United Kingdom as they were required to pay on the same type of goods from foreign countries, their British goods would have cost them more by £7,600,000—a sum which would have considerably hampered Anglo-Australian trade.

The value—to Great Britain—reckoned in the same way, of the preference of all the dominions combined exceeded £10 million for that year. In 1880 the total overseas trade of the dominions was valued at only £112 million. In 1921 its value was £1,026 million!

“The Empire to date has developed merely on its own initiative; there has been no concerted plan and I venture to suggest no real and genuine effort to date.”

“If we” (the representatives of the Imperial and dominion governments) “took the matter in hand and really did concentrate upon Empire development, I think that the figures over the next forty years would reveal a perfectly amazing commercial advancement for the whole Commonwealth of British nations; and this should be our objective if we pretend that we have any sort of vision into the future, —that we are really determined to achieve something for the generation that is to come after us.”

In 1922 the United States sent £222 million's-worth of—largely manufactured—articles to Great Britain and took in exchange only £76 million's-worth of British goods—a margin in favour of the U.S.A. of £146 million.

Argentina, Denmark and the United States (combined) in 1922 exported to Great Britain goods to the value of £318 million, and purchased in return goods to the value of only £113 million (including re-exports £23 million). The margin in favour of those three foreign countries was £205 million. During the same period the dominions supplied

the United Kingdom with produce valued at £232 million and took in exchange British (over 90 per cent. manufactured) goods to the value of £229 million—a margin in favour of the dominions of only £3 million.

“With regard to meat the British market is, if I may say so with all respect, practically at the mercy of a great combine over which Great Britain has no control at all, and that combine at the present time is surely and inevitably driving Australia out of meat production. Australia has a great surplus of dried and preserved fruits which is increasing. We must find a market for it.

“We” (the Australian Parliament) “have passed a new tariff rendering even more favourable the conditions under which Britain markets her goods in the Commonwealth. We have legislation protecting British exporters against countries with depreciated exchanges—anti-dumping legislation. We have done everything in our power to increase trade with the Mother Country.

“Our great desire is to populate our country and so remove ourselves from our present position of being but a few people occupying a very vast territory, the real value of which no man can estimate but which certainly is one of the greatest potentialities. Personally, I believe—coming from Australia—that those potentialities are greater than in respect of any other country in the world.

“Migration means markets. If we cannot have extensive markets we cannot have extensive migration.”

“Cannot a policy be framed to stabilise the price of such commodities as meat and wheat, to eliminate fluctuations, thereby confining the trader to his legitimate sphere of distribution, removing the incentive to speculation, and thus relieving, at one and the same time, the agricultural producer and the industrial consumer—at the expense of no legitimate interest.

“Agriculture at Home and in the dominions cannot flourish while Britain remains the dumping ground for every available foreign surplus.

“We should ensure that the British agricultural producer should have priority over all comers for the sale of his produce in the British market.

“We Australians demand that our own productions shall have first rights in our own market, and we recognise that the British agricultural producer has exactly the same rights as we claim for ourselves.

“In so far as the British farmer is not able to supply home requirements the dominions should be put in a position to supply, to the greatest possible extent, these requirements.

“The British consumer must be considered all the time. His interests must not be sacrificed.

"I think it could be claimed that a protective tariff with adequate preference could undoubtedly be made to achieve all our objectives. I am aware of the prejudice that exists in this country against any tariff system being applied to essential foodstuffs, but I would point out to the Conference that the country that attempts to obtain its food supplies for any considerable period, at prices below the cost of production, will certainly be eventually faced by a gradual decrease of production with the necessary corollary of scarcity of supplies, high prices, and, if the trouble be not remedied, ultimately by something worse. At the present time the position in Britain appears to be approximating to these unhappy conditions. The British farmer is, I understand, incurring heavy losses from his arable areas in spite of excellent crops. The dominion producer, in many instances, is unable to obtain prices that cover his costs. Surely we must look at the problem not as one of to-day, to-morrow, or the next day, but taking a wide view realise that proper measures to safeguard Empire agriculture will undoubtedly be in the interest of all classes of the community. The supply of some of the most important foodstuffs is now largely in the hands of foreign combines that manipulate prices to the detriment of both producer and consumer. Unless Empire agriculture can be encouraged, Britain must expect to see the control of its food supplies pass more and more into foreign hands, with what results in time of war recent experience can teach us.

"Protection of British agriculture and preference for the dominions could be introduced on a sliding scale so as to give some measure of stability to the market by bringing the tariff into operation only when the prices of commodities sank to so low a level as to be unremunerative to the agricultural producer, in other words a sliding scale tariff could be applied.

"A third system whereby British and dominion agriculture could be placed in a position of definite advantage over foreign supplies, would be by a system of subsidies, where required, to British agriculture, and some form of subsidy to the Dominions producer.

"Another system that has been suggested for giving effect to our purpose is an import license system to discriminate against foreign countries. It would mean that British agriculture would be left entirely uncontrolled, and the dominions would be allowed to send their produce into Britain without restriction, except in instances where British agriculture was able to supply the entire need of the community; but foreign imports would be allowed only under license, and their volume would be controlled by the licensing authority.

"In the interests of the producer and the consumer alike, fluctuation of price is generally detrimental. Fluctuations only benefit the speculative middleman. When prices soar, the producer rarely receives the full value of the increase, but the consumer invariably has to pay it. A severe fall in wholesale prices is very rarely fully reflected in the retail price to the consumer, but is always completely met with the producer. It would therefore seem that stable prices would benefit both the producer and the consumer. It seems possible that a system of this sort, if found workable, might enable us fully to realise all our three objectives."

In concluding a speech before the Bankers of London, Mr. Bruce said :—

"Australia to-day offers the greatest opportunities of any country in the world. We are determined to proceed with the great task of developing the wonderful heritage that has come to us. We invite your co-operation and assistance in doing so. We believe that Australia to-day offers a magnificent opportunity to the British citizen who has courage and initiative and is prepared to work. We believe it offers the greatest stability and security for the investment of British capital.

"I ask you—the leaders of finance in London, the financial centre of the world—to turn your eyes towards Australia, and to consider whether we will not, in the future, ensure the greatest prosperity of our people, and the maintenance of the prestige, power, and position of Britain and of the British Empire, better by retaining our own people inside it and investing our money in our own possessions than by sending our men and money to add to the prosperity of foreign countries. I urge upon you that our paramount duty to-day and for the future is to apply ourselves to the great task and develop the British Empire and its unrivalled and inestimable potentialities."

RELY ON YOUR DOMINIONS.

The following is an extract from the *Daily Mail* dated 19th October, 1923. It deals with the Board of Trade's returns for September relating to exports of cutlery. The total value of the exports for that month amounted to £107,000. Of this sum, £41,000's worth, or more than one-third of the whole, was taken by Australia alone. Commenting on this fact, the *Daily Mail* said :

"These figures shew the sacrificial manner in which the Overseas Dominions are supporting home industries to the exclusion of foreign products. In 1913, countries outside the British Empire took more than half of the exports, and their buying had been shrinking for a considerable period before that year.

"These figures make it easy to picture what the lot of the makers in Sheffield would have been but for the loyalty of the Dominions.

"While British merchants and the British public are simply tumbling over one another to obtain the cheap German goods which have been filling the market since the Armistice, the people of the Southern Dominions have refused to have them at any price. They have cheerfully paid twice as much for their cutlery as they need have done.

"Before they buy an article they demand to know the country of its origin, whereas in Great Britain, only the price factor apparently counts, except with an insignificant majority."

And the attitude of the Australian Purchaser is the same in regard to all other manufactured goods.

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UNEMPLOYMENT—

An Australian manufacturer was in Glasgow in September, 1924. He required a pair of goloshes, and went to three retail houses in search of a pair of British make—unsuccessfully.

The shopman seemed surprised that he objected to buying foreign made goloshes.

Finally, he went to a rubber factory. He was fitted with a pair which were quite satisfactory. Almost as an after-thought he said: "Of course, these are your own make?"

The salesman replied: "No, sir, they are American."

The gentleman who related this experience is the woollens manufacturer in the largest way of business in New South Wales.

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Acquire the habit invariably to ask for British manufactured goods and produce; and if obliged to purchase imported goods, *insist* that they are British Empire products.

If in some cases foodstuffs and other articles from overseas are not in every respect pleasing to you, take the trouble to write a helpfully critical letter to the firm responsible for the production—such a letter would be appreciated, and your requirements would in future be studied.

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For the one year, 1923, the A.M.P. distributed among its Ordinary Department policy-holders alone, cash surplus amounting to over £1,987,000, in the form of reversionary additions to the sums assured of about £3,350,000. The cash amount named represents a return to the policy-holders who participated of 50.9 per cent. of the premiums paid by them during the year. Such a proportion is believed to be unprecedented in the history of life assurance.

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Note Issue Department	56,890,225
Other Items	5,014,617
							<u>£136,920,721</u>

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